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MEDITERRANEAN SEA
GULF OF THE ARABS
ALEXANDRIA
Sebaca or Lake Mariout
Berelos
Demenhur el Wahash
BAHRI OR RIF
DAKELIE
SHARKIE
ALGIOFAR
el Arish
Tineh or Pelusium in ruins
Sebaket Bardoil or King Baldwin's L.
Semennud
Belkin
Mit Demsis
Miit Kamar
Belbeis
L. Sheib or Bahr Ibn-Mengi whose Water is bitter
Lakes of Natron
Barrai Sahahiat
ARABIA PETRÆA
Gold Country
EL HARAM or the Pyramids
Gizeh
Old Cairo
KAHIRA or CAIRO
Vally of Tiheh or Wandering Valley
Calaat et Nabal or Castle of the Palms
The Suez
Road of the Pilgrims of Mekka
Torrent that has Water
DESERT OF TIHEH
Ailah in ruins
Birket el Kerun
Sdur
Plain of Baccara or of the Cow
Benisuef
Bahr Jusef
Plain of Sannur or of the Cat
Behnese
BAHR ASSUEL
M. Horeb
GEBEL TOUR or M. SINAI
el Tor
Ras Mohammed
Miniet Ebn Kasib
Ashmunein
Ensené or Shek Abade
Wadi Gamus or Valley of the Buffalo
The Mountain which borders the Nile on the East side called by a general name in its whole length GEBEL MOKATTEM or Cut Mountain
BAHR KOLZUM
Coast Little known
Sheduan I.
Monfalot
SIUT or OSIOT
Abutige
THE DESERT that extends to the East of the Nile as far as the Red Sea is occupied by two Families or Tribes of ARABS
BENI-WASSEL to the North, ARABDE to the South.
Sufanj ul Bahri or Sea Spunge
Great Port which is the Myos-hormos of the Antients
SAID
Tahta
Ekmun
GIRGE
el Coseir Port of Girgé or of Kene & of Kous
Kene
Dendera
Keft
Kous
What is here circumscribed by Dots seems to have been contained within the Antient Thebes.
Upper Land
Asna or Esneh
Maaden Uzzumurud or Mine of Emeraulds
Gebel Teilemon
Mountain of the Stone Baram or Barantes
Shelalat or the Cataract
Assuan or Suené
LIBYA
EL WAH
NUBIA
EGYPT,
called in the Country
MISSIR,
BY J.B.D'ANVILLE,
of the Royal Academy of Belles Lettres, & of that of Sciences of Petersburg
MDCCLXV.
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OBSERVATIONS

ON THE

MANNERS AND CUSTOMS

OF THE

EGYPTIANS,

THE

OVERFLOWING OF THE NILE AND ITS EFFECTS;

WITH

REMARKS ON THE PLAGUE,

AND

OTHER SUBJECTS.

WRITTEN DURING A RESIDENCE OF TWELVE YEARS
IN CAIRO AND ITS VICINITY.

BY JOHN ANTES, ESQ.
OF FULNEC, IN YORKSHIRE.

ILLUSTRATED WITH A MAP OF EGYPT.

London:
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1800.

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TO THE PUBLIC.

THE following ſheets were never written with a view to publication; but as they had paſſed through the hands of ſeveral reſpectable men, who gave it as their opinion, that they contained ſome uſeful information, which ſhould not be withheld from the Public, as they might throw additional light upon that dreadful diſorder, the Plague: this argument had ſome weight with the Author, as even the probability of doing the leaſt good would encourage him to publiſh his obſervations, which otherwiſe were noted down merely in order to gratify his own curioſity. Some of thoſe gentlemen even thought the Author ought to compile a hiſtory of the country, its cuſtoms, inhabitants, trade, &c. but when he was conſidering about it, Mr. Savary's Letters on Egypt, and ſoon after Mr. Volney's Travels, made

their appearance, which occaſioned him to abandon that ſcheme entirely: not becauſe he approves of every thing that they ſay, far from it; but he ſaw he would often be obliged to contradict not only one, but both of them, and thus confound the Public: for what reaſon has he to expect, that his aſſertions ſhould be more entitled to credit than thoſe of others. Beſides this, it can be of little benefit to the Public to know, that an inſignificant upſtart, acting without any ſettled principles, like Ali Bey, was born in Abaſſa, Circaſſia, or Georgia; that he died in this or the other way, &c. for in my idea it is ſufficient for moſt readers to have a general knowledge of the Mamelucks, and their government, which have varied but little theſe many years, of which Pocock, Norden, Niebuhr, (theſe three authors, particularly Norden, I would recommend, in preference to all others, to the reader) have given very good information, and Mr. Savary's and Volney's accounts are moſtly copies of it. For, though the former deſcribes the whole of Upper Egypt, he never was himſelf beyond Cairo; of which I was an eye-witneſs.

neſs. The latter came to Cairo near one year after I left it, ſtaid but ſeven months without the advantage of the Arabic language, and in a troubleſome time, when travelling into the interior parts was dangerous. We can, therefore, not expect that his narrative ſhould be ſufficiently correct to paſs for the ſtandard of truth.

The Reader will always keep in view, that theſe ſheets were originally written many years before Mr. Savary's Letters, and Mr. Volney's and Bruce's Travels, and alſo long before I had ſeen Mr. Alexander Ruſſel's Treatiſe concerning the plague. If, therefore, there are particulars in them on which we all agree, it is only a corroboration of the evidence on the ſide of truth; and if they ſhould furniſh hints to a more enlightened writer, from whence to draw ſome uſeful concluſions for the good of the Public, the Author will think himſelf amply rewarded for his trouble.

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TO

TO THE HONOURABLE

DAINES BARRINGTON.

SIR,

SOME time ago the Rev. Mr. Latrobe informed me, that it would be agreeable to you to ſee ſome of thoſe remarks, which I had made on different ſubjects in Egypt. In conſideration of the friendſhip and eſteem which my late worthy brother-in-law had for you, I would have immediately complied with this requeſt, had I made them in the Engliſh language; but having noted them down in German, it required ſome time to tranſlate them, which on account of my other employments, I could not finiſh till lately. I now take the liberty to ſend them.

But I beg leave to obſerve that, although I have always conſidered myſelf as an Engliſhman, my father having been naturalized and intruſted with offices in the King's ſervice, in America, yet having been educated, and having ſpent moſt of my time among foreigners, I am

far from being able to expreſs myſelf in the Engliſh language with any degree of accuracy; and you will, therefore, excuſe my preſenting you with ſuch an imperfect account.

From my infancy I always was very fond of geographical knowledge. But as my ſituation, and other circumſtances, did not permit me to extend it as I could have wiſhed, I was obliged to content myſelf with picking up as much as I could from private inſtruction, or from books. However, this did not in the leaſt damp my deſire to come, as much as poſſible, to the bottom of every thing that preſented itſelf to my view, or of which I had any information. I ſeldom could content myſelf with the firſt anſwer I received, when I enquired into any ſubject, for I wiſhed always to know upon what foundation it was grounded, and whether the perſon, who gave me the anſwer, was qualified to give a ſatisfactory one or not. This diſpoſition made me oftentimes act the part of a dumb ſpectator, particularly in Egypt, where I frequently obſerved that travellers, even ſuch as otherwiſe had all the advantages of learning, gathered their materials, not only to ſatisfy their own curioſity, but to compile a narrative of their travels for ſale. I have, ſometimes, myſelf, aſſiſted theſe gentlemen, and often adviſed them not to note down all they heard from unqualified perſons; knowing, by my own experience, that the Arabs will never leave you without an anſwer, though they do not at all care whether there be any truth in it. Some of them will give an anſwer, becauſe they like to appear as if they

they knew every thing; others, and moſt of them, will do it, becauſe they hope to reap ſome little advantage by it; and I have often been amazed to hear the incoherent ſtuff, which thoſe inquiſitive gentlemen received as anſwers to their queſtions.

If a foreign traveller, paſſing through our poliſhed country, ſhould afterwards pretend to give a deſcription of the manners, cuſtoms, government, and particularities of the country and its inhabitants, by ſuch information as he might have gathered from inn-keepers, coachmen, chambermaids, and from the company he might accidentally have met with in coaches, as we now and then find to be the caſe, he has to blame himſelf only; for, if he be a man of learning, he may always find people enough, capable of informing him of any thing he would wiſh to know, and alſo of converſing with him in one or other of the common languages.

But this is quite otherwiſe in Egypt. Travellers there, though they may be otherwiſe very well informed, and may have all the advantages of learning, commonly know nothing of the language of the country, which is Arabic. They muſt, therefore, addreſs themſelves to an European to be their interpreter, or hire a Greek or an Armenian for that purpoſe. Theſe latter are, upon the whole, not ſenſible of the importance of giving always a correct and ſatisfactory anſwer: they are, perhaps, at the ſame time, as well as many of the Europeans, ignorant where to apply for proper information.

As long as I was at Grand Cairo, I was not acquainted with any Europeans reſiding there, who were furniſhed with learning ſufficient for this purpoſe; though otherwiſe well informed for their ſphere of life. All the information they could give was what they had gathered in the narrow circle of their acquaintance. Suppoſing even, that a few merchants, in the way of commerce, had formed an acquaintance with ſome one or other of the moſt learned in that country, as I alſo had done; yet theſe people are either ill-tempered, or unwilling to inform Europeans of the truth, or ſuch intolerable boaſters, magnifying every thing which they think may add the leaſt to their honour, that very little dependance can be had upon their information; and, indeed, having by long experience learned to know the diſpoſition of moſt of the Arabs in this particular, it has made me miſtruſt the whole account of their ancient and modern hiſtory. There are ſtill Arabic writers of chronicles at Grand Cairo, who will give the moſt boaſting accounts of a trifling and inſignificant fight between the Egyptian Beys, where, perhaps, five or ſix out of ſeveral thouſands were killed; which, I am ſure, if they ſhould be read ſome hundred years hence, would appear to be greater battles than any one fought between the King of Pruſſia and the Auſtrians in the ſeven years war. I will allow, that the Arabs, in their firſt fire of ſuperſtition, may have exerted themſelves more than they do at preſent; but I am ſtill apt to think that great allowance muſt be made on account of their national diſpoſition to boaſt. It is true, it will make the effeminacy of thoſe whom they

they have conquered appear ſtill greater; but if we conſider that it is not effeminacy alone, but internal diſſentions, which make people fall a prey to their enemies, we ſhall not wonder at it, for this was too much the caſe in thoſe times. But I am led from my ſubject.

What I have obſerved above ſerves only to prove, that if a traveller goes by way of curioſity to Egypt, who may otherwiſe be very well qualified, but does not remain long enough in the country to become maſter of the language, and able to ſee with his own eyes, he muſt neceſſarily content himſelf with what he may partly gueſs at, or may have gathered imperfectly from the natives, or from this or the other European merchant, who is, perhaps, not accuſtomed to very accurate obſervation. From this he muſt compile his narrative, and often full credit is given to every particular of it, in proportion to the rank the author holds in the learned world at home, or on account of the elegant ſtile and embelliſhments with which it may be adorned. His aſſertions are frequently cited, and copied by others, for the whole next century; and this is, probably, the cauſe of ſo many errors and miſrepreſentations as are frequently met with in geographical deſcriptions.

Mr. Volney, in his Travels into Egypt, p. 70, ſays: "That the dryneſs of the air, particularly in the Deſarts of Egypt, is ſuch, "that

that dead carcaſſes are found in it, dried up in ſuch a manner, and ſo light, that a man may eaſily with one hand lift up the entire body of a camel."

It is a pity that ſuch abſurdities are copied and inſerted into ſome of the lateſt Dictionaries of Arts and Sciences, by which they are handed down from one century to another. For a little reflection would have told him, that though the aridity is great, and dries the fleſhy parts up to a great degree, yet the bones of a camel cannot weigh leſs than about 3 cwts. and theſe are never dried up, or become light, in the ſame degree as the fleſh, as may be ſufficiently ſeen by the bones of the mummies ſcattered about the pits, which certainly had time enough to dry.

Page 62. Mr. Volney deſcribes the ſoutherly wind, which he endeavours to make as dangerous as the well known ſamour, or ſamiel, ſo common in Meſopotamia, and likewiſe mentioned by Mr. Bruce as frequent in Nubia; but this is by no means the caſe in Egypt. During the twelve years of my abode there I never heard of one perſon being ſuffocated by it, and I myſelf have been many times overtaken by it in the open field, and once, in particular, where I had little or no ſhelter, but I felt no other inconveniency from it but a more difficult reſpiration than uſual, and an intolerable duſt, exceeding fine, and penetrating every where.

It

It muſt be allowed that all accounts are not of this kind: ſome of them have been written by very able men, who did not merely paſs through, but reſided a long time in thoſe parts which they deſcribed. But we have, however, of late, too many haſty productions which are fully credited; when, at the ſame time, a man like Mr. Bruce, who has ſpent four years in Abyſſinia, and made himſelf perfectly maſter of the language, and well acquainted with the country, can ſcarcely find any credit, becauſe he relates one or other particular, which has never yet been heard of.

Suppoſing, as you have alſo very juſtly obſerved, I ſhould be the firſt to relate ſuch facts as I have often ſeen in Egypt, as, for example: that the natives will eat ſerpents, or half a dozen large ſcorpions, with their ſtings, and alive, that they ſuffer themſelves to be ſtung by them, or to be bitten by the moſt venomous vipers, without any harm;* that I have ſeen men eat chopped ſtraw like an aſs, and many

* Mr. Savary ſays, vol. i. page 65: "That the ſerpent-eaters avoid their bite." If thoſe whom he has ſeen avoided it, they cannot have been of that claſs of people who poſſeſs a ſecret, not only to faſcinate, but likewiſe to prevent the bad effects of their poiſon, and of that of other poiſonous reptiles, ſuch as ſcorpions, &c. (centipedes I have never ſeen in Egypt.) They muſt have been merely ſerpent-eaters, as pigs, crows, and other animals, often are.

Being ſo long reſident at Grand Cairo, I had frequent opportunites to obſerve them. I have often met them in the ſtreet hung all around with ſerpents, ſome wrapped around their necks, others in their boſom, and all of them alive, which at

many more things of this kind, without adding any further explanation, would not all ſenſible people call me an impoſtor? And yet all theſe aſſertions may every day be proved to be facts at Grand Cairo.

at firſt appeared not a little alarming. When Mr. Bruce was at Cairo, he wiſhed likewiſe to ſee it. He lodged with a French merchant, Mr. Roſe, a friend of mine, who ſent for one of theſe people to exhibit before us. When he entered the houſe, he was aſked where he had his ſerpents? He put his hand in his boſom and brought out a large horned viper (ceraſtes) and threw it on the ground; the animal, rather enraged at ſuch rough treatment, made toward Mr. Roſe; fearful that it might bite him, the man run after and got hold of it in the middle with his naked hand, when it turned round and bit him between the fore-finger and thumb, ſo that the blood appeared. He ſeemed not to mind it at all, and only rubbed it with a little common earth: nor was it followed by any bad conſequence. Had he really taken out the fangs and the bladder containing the poiſon, the animals which were bit by the ſame viper immediately afterwards would not have died ſo ſuddenly. Several fowls and a cat were afterwards bitten by it, and died immediately. I have ſeen ſeveral little boys that could do the ſame. When Baron Tott was at Cairo, ſome of the Europeans reſiding there ſpeaking of it made him very curious to ſee it. A little boy happened juſt then to be paſſing along the ſtreet, who often uſed to come a begging; and, as we knew he was one of that claſs, we offered him ſome paras if he would get ſome ſcorpions, and ſhew us what he could do. The boy, who had not one rag of clothes about him, except a little red cap on his head, went immediately to ſome old garden walls, and came back in a ſhort time empty handed. We aſked him where he had his ſcorpions? He took off his little cap, under which he had five very large ones, which he threw upon the ground, and began to play with them before us; they frequently ſtung him, but he ſeemed not to mind it at all. I myſelf grew very ſuſpicious, that he might have taken

When Mr. Bruce returned from Abyſſinia I was at Grand Cairo. I had the pleaſure of his company for three months almoſt every day: and having, at that time, myſelf had an idea of penetrating into Abyſſinia,

taken away their ſting, and therefore ſtooped to examine them very cloſely, but he warned me not to come too near, and to convince me of the contrary, he took ſome of them up with his fingers, and ſhewed me the ſting. I then aſked him how he came to it, to be able to do what ſome of his companions could not do? He anſwered: My father gave me ſomething to drink, and the Sheick or Prieſt, made me ſwallow a paper with ſomething written upon it, after which he told me, that no ſnake or ſcorpion could hurt me, and this has been the caſe ever ſince. As I have always been very backward to believe things which had ſo much the appearance of mere ſuperſtition, I examined many others of this claſs of people, in order, if poſſible, to find out the true cauſe of it, for the good of mankind in general, but I was never able to ſucceed. All agreed that they had ſwallowed ſomething; but, I ſuppoſe, partly to hide the true art which they poſſeſs, and partly to inſpire me and others with a ſenſe of the merits and ſupernatural powers of their Sheicks, they always wrapped up the whole in ſo many ſuperſtitious additions, that I could never make any ſenſe of it. I only wiſh that ſome future enquirer may be more lucky, as it would be of great benefit if generally known. Setting aſide the ſuperſtitious part of it, there might be ſomething in the draught capable to operate ſuch a change in the human frame, as to make it proof againſt ſuch poiſon. It is, certainly, not eaſy to conceive how this can be, therefore we often diſbelieve it, becauſe we cannot immediately compare it with things to which we are daily accuſtomed. But there are ſimilar circumſtances which we can as little account for; for inſtance, how is it that a perſon, who has once had the ſmall-pox, or meaſles, ſhould, for ever after, be proof againſt the infection? Have all thoſe humours, or whatever elſe it may be, which before made him liable to it, been for ever removed out of his body? If ſo,

Abyſſinia, I was very inquiſitive about that country, on hearing many things from him which ſeemed almoſt incredible to me. I uſed to aſk his Greek ſervant Michael, (a ſimple fellow, incapable of any invention)

how is it that, notwithſtanding, children born of parents, both of which are of this deſcription, ſhould again become liable to it: this ſeems full as incomprehenſible as the above; but we ſee it daily, we get uſed to it, we have, perhaps, in the beginning, thought about it; but, finding ourſelves unable to find out the cauſe, we drop it, and content ourſelves with knowing that it is ſo. Is it, therefore, not quite impoſſible, that there exiſts a remedy to make men proof againſt ſuch poiſons?

To faſcinate ſerpents, ſo as to draw them to ourſelves, ſeems, at firſt ſight, likewiſe to favour of ſuperſtition; yet it cannot be denied that theſe people poſſeſs a ſecret by which they are able to do it. Beſides the many inſtances which I have heard from men of the moſt reſpectable characters, I was myſelf eye-witneſs of ſome. A friend of mine, Mr. Bruno Arnaud, who lived at Cairo, in an old houſe, had found once a ſerpent in his bed-chamber; not being over fond of ſuch company, and ſuſpecting there might be more, he ſent for one of theſe men to take them away. When the fellow came in, my friend told him, that he was afraid he had brought ſome ſerpents with him in his boſom, which he would afterwards make him believe that he found in his houſe. He ſeemed affronted, and began to throw off one part of his clothes after the other till he was quite naked. Thus he went from one room to another, muttering ſomething all the while, and actually gathered, in a ſhort time, five large ſerpents around him; at laſt he ſaid there are no more. When we hear ſuch a thing for the firſt time, we are very liable to diſbelieve it, becauſe we never heard nor ſaw it before: but, ſhould we not do the ſame, had we never heard nor ſeen what our rat-catchers can do with rats and mice. There may exiſt ſome ingredients of which ſerpents are as fond, as mice and rats are of oil of rhodium, and cats of valerian, &c. which ſuch a man may place between his toes, or anywhere elſe,

invention) about the ſame circumſtance, and muſt ſay, that he commonly agreed with his maſter in the chief points. The deſcription Mr. Bruce makes concerning the bloody banquet of live oxen among the natives, he happened never to mention to me, elſe I could have made the ſame enquiry. But I heard not only this ſervant, but many eye-witneſſes often ſpeak of the Abyſſinians eating raw meat. There is no doubt at all of Mr. Bruce having been at the ſource of the Nile; but I cannot approve of his laying ſo very great ſtreſs upon this particular, and his ſignifying as much as if he was the firſt European that ever had been there. P. J. Lobo's deſcription is very well known, and differs little in the main points from Mr. Bruce's. Beſides this, I wiſh there did not appear ſo much egotiſm through the whole performance, that he had been a little more accurate in mentioning diſtances, bearings and names, and that he had not coloured every thing ſo very high, which may incline readers to ſcruple the whole. I ſelected many errors and contradictions of this kind, and intended to ſend them to him, becauſe he had mentioned to me an intention to publiſh his travels again with additions and amendments, when I heard that he was no more. His deſcription of the pyramids

elſe, in order to draw them to him. With his muttering ſentences he only wiſhes to make his ſkill more important.

As for people eating chopped ſtraw, I have ſeen that done many times; they had it in a bag hanging on their ſhoulders. It was an act of beggars, who did it commonly ſtanding near a public back oven, in order to excite compaſſion from thoſe that paſſed by.

in Egypt is quite erroneous, and ſeems to be a copy of Wanſleb's opinion. I have viſited them above twenty times, and could bring ſtrong arguments againſt his theory, as likewiſe againſt the ridiculous idea of forcing them (copied by Savary from Mr. Maillet, a French Conſul at Cairo, at the beginning of this century), if it anſwered any good end. I will only mention thus much, that if the builders of them had been ſo over anxious to conceal the chambers within, they would have done it much more effectually, had they left an irregular paſſage in the common walling, which afterwards, when the corpſe was depoſited, they might have walled up with the common ſtones; for, by making ſuch ſmooth paſſages, ſome of them lined with curiouſly worked red granite, they effectually pointed out the road to the chambers, as ſoon as the beginning of them was diſcovered, if even they had, according to Mr. Maillet's idea, been filled up ultimately. But if I endeavoured to contradict Savary in all where he, as well as Volney, is wrong, I ſhould ſwell my obſervations to a diſagreeable length and ſize.

I have learned by experience, how very difficult it is to come to the bottom of a ſingle and ſeemingly trivial thing. As for inſtance: the people of Egypt are divided, and called either Saad or Haram, ſomewhat in the ſame manner as the Engliſh into Whigs and Tories. Though no animoſity be obſerved between the two parties, yet every individual will immediately tell to what claſs this or that man belongs. I have, for many years together, laboured to learn the

the origin of it, and I have aſked many hundred people, but could never get a ſatisfactory anſwer, till ſhortly before I left Cairo a perſon told me, that it originated from the death of Ali, Mahamet's ſon-in-law, viz. When the party of Omar had killed him, they cried out, *Hadah Nahar Saad!* which ſignifies: This is a lucky day. The counter party ſaid, *Hadah Haram!* or, this is unlawful, unpermitted, wrong, &c. This anſwer or explanation ſeemed to me the moſt probable. Now, conſidering this difficulty, and obſerving the common method taken by travellers to collect their materials, I muſt own it made me exceedingly diffident of all haſty productions; nay, I often thought no geographical deſcription can be entirely free from miſtakes, as it ſeems to be out of any man's power to obſerve every thing himſelf, or to qualify himſelf for being able to judge of all ſubjects with equal preciſion. But why do I detain you with theſe reflections? They cannot be new to you.

Having, as obſerved above, not had the opportunity to qualify myſelf ſufficiently, it has always made me exceedingly diffident of my own abilities; nor could I ever think myſelf capable of being of any ſervice to the public, in endeavouring to rectify ſome of the errors we ſo frequently meet with. I have, therefore, never attempted to note any thing down with a view to lay it before the public, or I ſhould have taken more pains to gather materials, and to have made a greater number of exact dimenſions, diſtances, and meaſurements, than I have done. But being in Germany after my return, in the

year

year 1782, I was oftentimes very much ſurpriſed at the incoherent queſtions that were put to me, even by ſuch people as paſſed for very learned, and as I obſerved they had falſe notions of the climate, the overflowing of the river Nile, and the plague, I have written theſe obſervations from ſome remarks I had from time to time noted down during my ſtay in Egypt, merely with a view to ſatisfy my own curioſity, in order to give ſome of my friends a true idea of them. But I cannot look upon them but as a confuſed heap of materials, among which a ſkilful artiſt might, perhaps, ſelect ſome parts which he might employ for the public good. As for the truth of the ſtated facts, I am very ſure they might all be proved, if you ſhould even think that they might be of any uſe to the public, as ſome of my friends wiſhed to perſuade me, yet I could not eaſily conſent to have them publiſhed, unleſs they ſhould be dreſſed in a better ſtyle, which is out of my power. Beſides, I would willingly omit every thing which might reflect upon learned men in general, or which might appear to be perſonal, as I would not willingly give offence to any one.

If the remarks, as thoſe I ſend, ſhould be of any ſervice to you in particular, I would willingly furniſh you with others, if you will let me know the ſubject; and I ſhall always be glad to have an opportunity to ſhew how much I am, Sir,

Your moſt obedient humble Servant,

Fulneck, 30th April, 1788. JOHN ANTES.

TO CAPTAIN BLANKETT.

SIR, *Fulneck, 8th June,* 1788.

I DULY received your favour, dated 30th May, and I am very willing to give you all the information I can concerning the caravans which go from Egypt to the interior parts of Africa. I am very ſenſible, that it is abſolutely neceſſary to advance nothing but what, according to the beſt of my knowledge, is ſtrictly true, as it might be of great conſequence to thoſe perſons concerned in it, and therefore I will do ſo.

As much as I know, there are but two caravans that ſet out from Cairo for the interior parts of Africa, viz. one that goes to Dongala, and by this way one may go to Sennar, and even to Abyſſinia; and the other, which is the moſt regular, ſets out from Cairo for Upper Egypt, from whence it turns off to the weſtward, or better to the ſouth-weſt, (according to what I could underſtand of them) to a country or place which they call Tarfur. There is, indeed, a third caravan that comes from Morocco with pilgrims for Mecca, and goes back the ſame way; but this caravan does not go very far inland, and moſtly follows the ſea ſhore: beſides this, Chriſtians would not be permitted to travel with them.

The

The caravan that goes to Dongala is conducted by, and conſiſts of Nubians, who, in Egypt, are called Berberi. They are ſtrict Mahometans, but I do not think it impoſſible that an European might travel with them; and I have known ſome Greek merchants who had made that journey in their company. There is always ſome danger to travel in any of thoſe parts; and, though it may not be on account of thoſe nations with whom one travels, yet there are almoſt every where roving tribes and parties, againſt whom one muſt be upon one's guard. As for the Nubians themſelves, I do not think them ſo treacherous. There is a vaſt number of them at Grand Cairo, where they come to ſeek for ſervice with merchants, as footmen do. They paſs for remarkably honeſt, and the merchants are very fond of having them on that account. They often ſend them on meſſages with large ſums of money, and I do not remember to have heard that any of them proved unfaithful. It is true, they might be ſo at Grand Cairo from ſelf-intereſt, and perhaps prove to be the reverſe in their own country; for it is known that their King, at Sannar, has murdered a French ambaſſador, Monſieur Du Roule, in his way to Abyſſinia, under a frivolous pretext, in the year 1705: but, it muſt be conſidered, that he tempted them by his own imprudence, by expoſing to public view all the preſents he had brought with him for the Emperor of Abyſſinia. However, I am inclined to think more favourably of that nation; for, if treachery was their natural character, it would be more obſervable among ſo many of them at Grand Cairo, where they ſeem to be a quiet and inoffenſive people.

They

They are commonly of a ſlender make, like the Arabs, and reſemble the Abyſſinians in colour, which is a browniſh black. They have their own language; but any gentleman that may be inclined to travel to their country, may eaſily find faithful ſervants of that nation, at Grand Cairo, who would go with them, and who are maſters of the Arabian language: this, I think, would be highly neceſſary, and ſhould not be omitted.

The ſecond caravan, which goes to Tarſur, conſiſts of, and is conducted by a people called Julape at Grand Cairo. They reſemble the Nubians in ſome meaſure; but have, at the ſame time, more of the negroes in their colour and features: they are alſo Mahometans, but they do not ſeem to be quite ſo ſtrict, nor ſo ſuperſtitious, as many others. I have myſelf been acquainted with the leader of this caravan, who ſeemed to be a good natured honeſt man. He ſeveral times invited me to go with him to his country, and I would have had no ſcruple to truſt myſelf to this man, if I had had any intention to make that journey. By all I could gather from his relations, I could not but think that they came from a great diſtance; for he told me, in broken Arabic, that they travelled a long time, and ſuffered great hardſhips on the road; that they oftentimes meet with no water for ſeveral days, and that many of their camels die on the road. He told me there was no danger for ſtrangers in his country, and every thing was in great plenty, and the ground very fertile. They bring a great number of negro ſlaves of both ſexes to Cairo,

who entirely reſemble the Guinea negroes; but moſt of the males they ſell at a certain village in Upper Egypt (the name of which has ſlipped my memory), where they are made eunuchs, and then they are ſold in all parts of Turkey. Their other commodities are elephant teeth, gold duſt, ſome black ebony wood, biſam, monkies, civet cats, corbages made of the ſkin of the hippopotamus, and bullocks hides cured for borachios, or water bags, to convey water upon camels through the deſerts; and one muſt allow, that this leather is ſo well cured for the purpoſe, that no other can come up to it: beſides the above, they bring ſome other articles of leſs conſequence.

Soon after I came to Grand Cairo, I ſaw a Damaſcene Chriſtian that had been in their country; this ſhews plainly, that theſe people are not ſuch enemies to the Chriſtians, in general, that they would not ſuffer them to travel in their company. But, as I then underſtood but very few words of the Arabian language, I could not gather any intelligence from what he related about the country, and the journey thither; but, by all that I could obſerve, and by what I could gather by ſeveral of theſe people, I would, for my own part, have had leſs ſcruple to venture upon a journey with them, than upon one to Nubia. I do not doubt that theſe people have connections, and travel far beyond their own boundaries, and to the moſt interior parts of Africa, yet I could never learn that they join any other caravan from Tripoli, Tunis, or Algier; but I alſo did not enquire particularly into this.

The

The travelling with a caravan, in thoſe deſerts, is connected with many difficulties. No other animals will do ſo well for it as camels and dromedaries; theſe muſt ſerve to carry all the baggage, and alſo to ride upon. There are three ways for this: 1ſt. Either to ride upon their backs on a ſaddle; or, 2d. To have a ſort of baſket, of which they place two upon one camel, and ſo two perſons may ride, and even ſleep in them. 3d. They have a ſort of horſe-litter, which they call tachteravan; this is carried by two camels, and this is the moſt commodious, and moſtly uſed for women, and weak people of quality. A traveller muſt always carry a ſufficient quantity of proviſions for the whole journey: he muſt alſo have the neceſſary utenſils to dreſs his victuals: he muſt have one or more camels merely to carry water, as they often meet with none for ſeveral days: he muſt alſo be provided with a tent, to ſhelter himſelf wherever they ſtop in the night, or from the ſcorching ſun in the day. It is abſolutely neceſſary that he ſhould know ſo much of the Arabian language, that he may make himſelf underſtood. He ſhould alſo provide himſelf with faithful ſervants, of thoſe people to whoſe country he intends to go. Theſe would ſerve him, at the ſame time, for interpreters; but one cannot be too particular in the choice of ſuch a one, becauſe, too often, thoſe that appear at Cairo, where they are under controul, all ſubmiſſion, and full of zeal to ſerve you, prove quite the contrary when they find or think themſelves to be at large; yea, even ſometimes they become one's worſt enemies, and thereby not only fruſtrate the whole aim of the journey, but may likewiſe bring

one in danger of being robbed, and to loſe one's life. He ſhould alſo take care to be recommended to the leader of ſuch caravans, by thoſe merchants who deal moſt with them. This may eaſily be obtained at Grand Cairo, by means of ſome of the European, but ſtill better by the Damaſcene merchants, who are connected and deal with them. Beſides this, he ſhould have ſomething that will ſerve for preſents for the princes and officers of the country to which he intends to go, of which, he muſt neglect none, if he will be well protected. But theſe things need not always to be of great value; for theſe people can make little diſtinction between things, well or half finiſhed, if it is only ſomething new, and what ſtrikes the eye, and what they cannot manufacture themſelves. But all this may be had more ſuitably at Grand Cairo, according to the advice of thoſe merchants that deal with them, than whatever may be provided at random, by ſetting out from home. There are ſeveral merchants at Grand Cairo, as well Europeans, as country Chriſtians and Turks, who may be very capable of giving good advice and aſſiſtance; and to ſuch as theſe a traveller ſhould be recommended, of whom I might perhaps name ſeveral, and aſſiſt in it.

By ſome acquaintance I had with various merchants from Tripoli, Tunis, and Algier, I heard that they travelled far inland from all thoſe places. Their manner of travelling is quite the ſame, but I can give little advice about the rout they take, nor to what diſtance they go. I remember an Algerine merchant, at Grand Cairo, with whom I have

have dealt in various ways, who had been far inland, but I do not recollect the name of the places he went to. He was a very honeſt man, and I would have ventured to go any where with him. But it muſt always be kept in view, that ſuch as he are very rare, and a traveller ought to be very cautious not to make a haſty friendſhip with every one that may make him a friendly face, for ſuch friends too often become very troubleſome, if not dangerous.

Such travels are, upon the whole, hazardous, and a perſon who undertakes them, muſt certainly not be afraid of danger, for, though all may appear very favourable, one can, however, aſſure nobody of a ſucceſsful iſſue.

This is all I can ſay for the preſent, in anſwer to your letter, and if it is to your ſatisfaction I ſhall be glad.

I have the honour to be,

Sir, Yours, &c.

JOHN ANTES.

P. S. By reading your letter once more after I had wrote the above, I thought I had not been explicit enough in anſwering the following queſtions:

1ſt. Who are the moſt proper perſons to be employed on a ſervice of that nature? And what are the qualifications moſt neceſſary?

2. How

2d. How far does the ſuppoſed enmity of the Moors to the name of Chriſtian prevail, and in what manner can it be beſt obviated ?

For an anſwer to the firſt, I can only add to what I have ſaid before, that beſides being qualified, and having the neceſſary apparatus to make proper obſervations, a traveller ought to have a conſtitution able to bear any fatigue, which is unavoidable on ſuch a ſervice. If he can draw, or has a perſon in his company able to do it, it will add greatly to the illuſtration and utility of his obſervations. For anſwer to the ſecond, I muſt add to what has been ſaid before, that the enmity to the name of Chriſtians among the Moors is not abſolutely general. There are ſome generous thinking people among them, and theſe are more found among the commercial part, of whom theſe caravans are always compoſed. It is quite a cuſtom among thoſe people to be under the protection of ſome ſuperior, and there is ſcarce a beggar at Cairo who has not ſomebody to look to for this. It is therefore adviſeable that a traveller endeavours to get one of the better and moſt generous thinking among them for his protector, but he muſt be delicate in his choice, as I have ſaid before. This may be obtained by a ſmall preſent in the beginning, claiming at the ſame time his protection, and then by an open and friendly behaviour, by which they are eaſily gained. And they make it a point of honour to protect thoſe that intruſt themſelves to them, and will always take their part, if ſome more ſuperſtitious would offer to inſult them. Common ſenſe will tell any gentleman that he muſt never

never ſhow, much leſs talk with contempt of their religion or government. The generous thinking among them eſteem every body that is faithful to his religious principles, and do not eaſily diſturb them; but they deſpiſe a man who profeſſes a certain religion, and does not obſerve his duty: ſo they will deſpiſe a Greek, or a Roman Catholic, if he does not keep Lent; but they will not take it amiſs of a Proteſtant, as ſoon as they hear that he is not bound to it by his religious rites.

OBSERVATIONS ON THE PLAGUE IN *EGYPT.*

THE plague is, without contradiction, the moſt terrible of all the diſorders the human ſpecies is ſubject to. At the ſame time, it is a diſorder from which any one may be perfectly ſafe, who has it in his power to perform a ſtrict and rigorous quarantine, though he may be in the midſt of a city where it rages with the utmoſt fury. The practice of the Europeans for centuries in Turkey, will prove this to be a fact, and it will alſo be confirmed by the following obſervations, which I made at Grand Cairo, in the years 1771 and 1781, when this calamity raged violently, as well in that city as in other parts of the country, particularly in Lower Egypt.

By a quarantine the following is to be obſerved, viz. as ſoon as it is known and evident, that ſymptoms of the plague are in the town, or in its neighbourhood, precaution muſt be taken not to mix too much in a crowd, particularly of the lower claſs of people. It is much eaſier known at Grand Cairo than in moſt other parts of

Turkey, as it is moſt commonly brought from Smyrna, Conſtantinople, or other ſuch parts, firſt to Alexandria or Damietta, and thence by degrees to that city. When the contagion begins to ſpread, all cloſe connection with other people muſt entirely be avoided; and in order to do this more effectually, the houſes ought to be locked up, and nobody permitted to enter, till it has ceaſed.

The uſual way of doing this among the Europeans is, to make a partition of boards at the inſide of their houſe door. In this partition a ſmall door is fixed to receive the neceſſary proviſions. This little door is kept conſtantly locked, in order to prevent careleſs ſervants from taking any thing in ſecretly. Before this door, on the inſide, a tub of water is placed, into which the ſervant, who is kept without, puts all ſuch victuals as will bear water, out of which they are taken on the inſide with an iron hook. But bread, rice, coffee, or any ſuch dry article, are found not to convey the infection, and may, therefore, be taken in with ſafety from a board upon which the ſervants hand them in. Such things may alſo be drawn up through a window, by a rope formed of the filaments of the date tree, and a baſket made of its leaves. But any thing of woollen, cotton, linen, ſilk, and the like, muſt by no means be taken in during the time of quarantine. The houſe door is commonly ſo contrived that the latch may be opened by a rope from above ſtairs, in order to let the ſervant in to bring proviſions; and there is commonly a place behind every houſe door for him to ſleep or ſit, that he may be at hand.

Letters

Letters are uſually taken in by a pair of tongs, and then ſmoked or drawn through vinegar. But the Europeans frequently convey their letters, or what elſe they may have to ſend to each other, in a wooden box ſealed, about which there muſt be no packthread or the like; and this is always received without ſcruple, provided one is aſſured that the perſons who ſend it keep a ſtrict quarantine themſelves. I have ſtill to mention, that all the windows may be open, and on the tops of the houſes, which are all flat, and commonly flagged, you may enjoy the freſh air, which often is exceedingly agreeable at that time of the year.

There is no inſtance of any European or others having caught the infection, who began and performed a ſtrict quarantine in due time: but many perſons, who have had the imprudence to take but a ſingle ounce of ſilk, or a handkerchief from without, have loſt their lives by it, of which I have ſeen ſome remarkable inſtances. The following is one of the many ridiculous ſtories which might be related: A man at Alexandria having locked himſelf up to perform quarantine, but being unable to ſhave himſelf, ſent for a barber, and in order not to touch him, for fear of catching the diſorder, put his head only through a ſmall hole to be ſhaved by the barber, without being touched on any other part of his body. However he paid dear for his folly, and died a very few days after. There is elſe no danger in talking with people infected with the plague at a very ſmall diſtance, which is often the caſe when ſuch infected perſons apply to European phyſicians, who perform quarantine. I have even myſelf been

walking in the ſtreet, where people dropped down dead, before I locked myſelf up in the houſe, and I only took good care not to touch any body.

To determine the cauſe of the plague, by phyſical arguments, ſeems to me to be a very difficult taſk. There is ſcarcely any thing real in the theories which have been hitherto formed, even by people of whom one might naturally expect ſomething ſatisfactory: they are liable to be contradicted by various obſervations upon the ſpot. Even that which may appear to be true at Conſtantinople, or other places, proves often to be the reverſe at Grand Cairo. There is upon the whole ſo much ſeeming contradiction in this phenomenon, that our thoughts are often at a ſtand, and a keenly thinking philoſopher may find a large field for many uſeful reflections.

Long experience has ſhown that the infection may be very eaſily prevented, even in the midſt of the ſurrounding danger, by a ſtrict quarantine as obſerved above. The various obſervations which I have made in conſequence, ſeem to contradict many of the theories formed hitherto, and I will now mention them, without being anſwerable for their infallibility.

1ſt. Many reaſons have been given in ancient and modern writings, to prove that Egypt was properly the country where this diſtemper was originally produced. It has frequently been aſſerted, that the yearly overflowing of the river Nile leaves ſuch a quantity of water and mud

mud in the ponds and loweſt parts of the fields, which afterwards becomes putrid, and conſequently infects the air to ſuch a degree as to produce the plague. This plainly pre-ſuppoſes an infection of the air. If we allow this, how could its influence be prevented, merely by avoiding all communication with infected people, when at the ſame time, theſe very perſons muſt live in the ſame air? Nor do they attempt in the leaſt to rectify it, and they cannot ſhut it out; on the contrary, they chooſe to enjoy it as much as poſſible, and oftentimes even ſleep in the open air on the top of their houſes, as it is commonly very dry from the month of February till near the end of June, which are the months when the plague rages moſt, if it is brought thither. One ſhould alſo imagine, that if the air was really infected, the many thouſands who are continually ſick and dying in it, would certainly not mend the air, but increaſe the infection. But the ſtrongeſt argument againſt the above aſſertion is: that the water of the Nile has by no means thoſe qualities imputed to it; but on the contrary, it never putrifies, as ſhall be fully ſhewn by different remarks, when I come to treat of that ſubject.

2d. Others maintain that it is produced by the ſuppoſed filthineſs of the Turks. This muſt alſo pre-ſuppoſe a corrupted air occaſioned by it, which the above arguments ſeem equally to contradict. Beſides this, it is a great injuſtice to the Turks to call them a filthy or dirty people. They are quite the contrary, particularly the better ſort of them, who are remarkably cleanly, and their religious principles

principles oblige even the common people to be in ſome meaſure ſo. To this I muſt add, that the ſtreets in the city of Grand Cairo are, upon the whole, by far not ſo filthy as moſt of the ſtreets of our own towns, to which the local circumſtances contribute not a little; for inſtance: as fuel is very rare and dear, every thing which in any way will ſerve for it is very diligently gathered from the ſtreets, and on this account, no dung of any kind, nor ſtraw, &c. is ever left in them. Dead carcaſes of any bulk are carried out of the town, and there they, as well as every thing of the ſame kind, which might remain in one or another corner of the town, are preſently devoured by innumerable dogs and birds of prey, who live in the ſtreets upon any thing they can find, eſpecially as the dogs have no maſters.

3d. Several writers ſuppoſe the plague proceeds from the canal or calige, which paſſes through Grand Cairo. It is very true that the remaining water is horribly corrupted, by the filth thrown in from the adjoining houſes, and the great number of neceſſaries that empty themſelves into it, which occaſions a moſt abominable ſtench for ſeveral months of the year, tarniſhing in a ſhort time even gold and ſilver in the houſes near it. But in this caſe alſo, a corrupt air is naturally commonly ſuppoſed to be the cauſe, which will likewiſe not agree with the above-mentioned obſervations. At the ſame time another ſtrong argument may be brought againſt it, which is founded upon a very long experience, viz. All the houſes of the European merchants in Grand Cairo have, for more than two hundred years, been

been ſituated cloſe to this canal or very near it; and neither have theſe, nor any of the other inhabitants, who live in the ſame ſituation, been more affected with diſeaſes than the reſt. This is a truth, which all the European phyſicians, who have for ſome time reſided at Grand Cairo, will confirm. Nor has any of thoſe merchants, who have performed a ſtrict quarantine, been ever affected by the plague. But though ſuch a circumſtance would certainly prove very pernicious in our countries, yet it ſeems not to be ſo here, and I know not to what to aſcribe it, but to the exceſſive dry air of Egypt, particularly in that ſeaſon. Some phyſicians have aſcribed the ſalubrity to the quantity of acid conveyed into the canal by the numerous neceſſaries, but upon what ground I cannot tell. It is alſo particular that this ſmell does never extend much farther than the back rooms of thoſe houſes ſituated cloſe to the canal.

I could never find ſufficient ground to aſcertain that the plague ever broke out in Egypt, without being brought thither from other parts of Turkey: and though there is a ſaying among the people, that the plague, which was brought from Upper Egypt, was the moſt violent, yet, whenever I perſiſted in my enquiries reſpecting the time when it was brought from thence, nobody could tell me. Some Europeans have, by conſtantly hearing it, alſo repeated the ſame thing, but without being able to prove it; for all depended on hear-ſay, and thoſe from whom I chiefly heard it, did not appear to be people qualified for making proper obſervations. On the other hand,

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one muſt allow, that traditions have often ſome truth in them; but as they are frequently, by length of time, ſtripped of all the circumſtances neceſſary to be known, little dependance can be placed upon them, and it is a queſtion whether this tradition be not as old as the memorable plague at Athens, which is ſaid to have originated in Upper Egypt.

During the twelve years of my abode in that country, which was from the 13th of January, 1770, to the 20th of the ſame month, 1782, the plague was three times there. At my arrival at Alexandria there were ſymptoms of it, which ſoon afterwards ſpread, and it became very violent there, as well as at Roſetta, and other parts of Lower Egypt; but, beſides a very few accidents, it did not reach Cairo ſo as to become general. But the next year, 1771, it was brought again into the country by ſome Mameluks from Conſtantinople, and raged with great violence, as well at Grand Cairo, as in all the Lower, and in ſome parts of Upper Egypt: but, as the Ruſſian war broke out at that time, by which all communication between Conſtantinople and Smyrna, in Turkiſh bottoms, was entirely cut off, the plague was kept perfectly out of the country during that period. At the ſame time there was but little of it at Conſtantinople; but, mean while, it viſited Bagdad and Buſſora, where it had not been before for time immemorial. In the year 1781, it was brought, firſt to Alexandria, thence to Roſetta, and ſo on to Grand Cairo, by ſome Jews, who, having bought a cheſt of old

old clothes at Smyrna, where it raged very furiouſly at that time, brought it to Egypt to be ſold at Grand Cairo. As ſoon as this cheſt was opened at the three different cuſtom-houſes, the infection immediately took place, and ſpread ſo as to become general in a very ſhort time. That the infection will remain in ſuch articles for years together, and be conveyed to any part, is a well known fact. In this way the plague once remained inactive in Cairo a whole year. The fact was this: a Damaſcene merchant had two black women ſlaves who died of the plague; he very imprudently had their clothes locked up in a cheſt, without firſt airing them. About the ſame time of the following year, he bought two new black ſlaves, and dreſſed them in theſe clothes, by which they immediately caught the infection, and afterwards ſpread it through the whole country.

From all theſe obſervations, I think Egypt cannot, with any truth, be called the mother of the plague; and I am ſure that, by a ſtrict quarantine, in the maritime towns, it might as certainly be baniſhed out of that country as out of any in Europe.

The ſymptoms of the plague are exceedingly various, as are alſo its effects. The infection ſeems to be moſt active when it firſt breaks out in the country, and very few of thoſe who are infected by it in the beginning eſcape. Some of them may continue even ten or twelve days before they die: others are frequently carried off in a

few hours. Again, others apparently quite well, will drop down dead in an inſtant: and the ſigns of the plague can only be depended upon after death. Theſe are buboes in the arm-pits, or the ſoft part of the belly, with a few dark purple ſpots, or carbuncles, on the legs, &c. When the buboes break, and diſcharge a great deal of matter, ſuch patients may chance to recover, if their conſtitution be ſtrong enough to reſiſt the diſorder: and this is often the caſe, particularly when the infection begins to decreaſe. It is a miſtaken notion, that a perſon, who has been once infected with the plague, ſhould not be liable to have it again, as is obſerved in the ſmall-pox. I myſelf have known a perſon who had it the ſeventh time, and died of it at laſt. Mr. Wortley Montague aſſured me, that he had had it three times himſelf. The ſick commonly complain of an intolerable heat, and ſay they feel as if thrown into a fire.

The plague often rages with great fury in one quarter of the town, and all at once ceaſes, and begins with equal violence in a quite oppoſite part, where little or nothing of it had been before. Sometimes a houſe is entirely cleared of its inhabitants, and, in another houſe, it perhaps takes one or two only out of twelve, fifteen, or more, and thoſe ſometimes die in the arms of others, who, with all the reſt, eſcape unhurt. There are inſtances of two people ſleeping in one bed, one of whom ſhall be carried off by it, and the other remain unaffected: it notwithſtanding remains true, that it is extremely dangerous

dangerous to touch any thing belonging to ſuch perſons. It is, indeed, exceedingly difficult, if not impoſſible, to give a ſatisfactory reaſon for all this; though, at the ſame time, it is evident, that there muſt be a pre-diſpoſition in the body, by which ſome catch it ſooner than others. But, I think, the great danger that attends a cloſe obſervation will, perhaps, keep us for ever in the dark, at leaſt, in a great meaſure.

In Egypt they are always pretty ſure when the plague will ceaſe, for it ſeldom remains after the 24th of June: this has given occaſion to the following ſuperſtitious notions, not among the Turks only, but particularly among the Cophtic Chriſtians. They ſay, and firmly believe, that angels are ſent by God to ſtrike thoſe people who are intended as a ſacrifice. All thoſe who receive the ſtroke muſt inevitably die; but thoſe that receive the infection through fear only, eſcape or recover. When they feel themſelves infected, they ſay, *anna matrub bel cuppa!* which ſignifies, I am ſtruck, or ſmitten, by the plague. As the 17th of June, according to the Cophts, is the feſtival of the Archangel Michael, on which day he lets a drop of water, of ſuch a fermenting quality, fall into the river, as occaſions its overflowings: they ſay that, at the ſame time, he, as the chief of all the other angels, orders all thoſe occupied in ſtriking the people to retire. The Cophts add, that if any of them ſhould ſtill lurk about in the dark after that day, they muſt abſolutely fly before St. John on the 24th of June.

A thinking mind, though it acknowledge the hand of God in every thing, cannot content itſelf with reaſons of this kind: for God, who has all the elements, and every thing in nature, at his command, can employ a thouſand means to obtain his aim without working miracles.

The natural cauſe of the plague ceaſing at that time in Egypt, is the great heat; Fahrenheit's thermometer, at that time, ſtanding generally at 90 or 92 degrees in the ſhade; and that this muſt be the cauſe, will appear by the following fact. In the year 1781, the plague broke out about the middle of April, and increaſed with ſuch rapidity and virulence, that ſometimes one thouſand people died of it in one day at Grand Cairo; but, about the middle of May, the wind ſhifted to the eaſt, which occaſioned a few days violent heat, in conſequence of which it immediately diminiſhed; and though, as the weather became again cooler, the plague did not leave the country before the end of June, yet it never encreaſed to the ſame degree as before, but continued dwindling away, till it ceaſed entirely when the ſummer heat became regular. It has always been obſerved in Egypt, that a great degree of heat, if even but for a few days, has this effect; but this time it was very remarkable. It has ſeveral times fallen under my own immediate obſervation, that veſſels came to Alexandria from other parts of Turkey, with many people on board affected by the plague, after that period, but the infection never took; and even the patients who came on ſhore infected with that diſorder

diſorder frequently recovered. Theſe are facts which may always be proved at Grand Cairo, or any part of Egypt, and they ſeem to contradict entirely that notion which I have obſerved in many authors, viz. that the plague was nothing but a putrid fever in the higheſt degree; but a great degree of heat would rather increaſe than diminiſh a putrid fever. Obſerving this effect of natural heat, I have ſometimes thought whether the ſame degree of artificial heat, ſo as to occaſion a conſtant perſpiration, might not be of more benefit, even to thoſe infected by the diſorder, than heating medicines applied for the ſame purpoſe? But, as I make no pretenſions to medical knowledge, I will leave this to others to determine.

Conſtantinople ſeems to be ſeldom or ever quite free from it; neither do the inhabitants of Conſtantinople, Smyrna, and other parts of Turkey, know ſo certainly when it will ceaſe, as thoſe of Egypt: moſt probably the reaſon is, becauſe the degree of heat is never ſo great there, for any continuance, nor ſo regular. At thoſe places, particularly the former, the intenſe cold ſeems more effectually to diminiſh its fury; but it does not eradicate it with ſo much certainty as the heat will do it at Grand Cairo. That the cold ſhould have the ſame effect at Conſtantinople, as the heat has at Cairo, ſeems to be another circumſtance difficult to be accounted for.

The plague rages moſt among the lower claſs of people. Several reaſons may be alleged for this, of which the chief is, their being more

more ſtupid and ſuperſtitious; for, as they believe that every man's fate, which is unalterable, is written upon his forehead, they think it abſurd to uſe any precaution; and, as they commonly are in want of clothes, they do not ſcruple to put on thoſe of their companions who have juſt died of the diſeaſe: beſides this, they live always more crowded together. The better ſort of people, or at leaſt thoſe in power, are not ſo much affected with it, becauſe they are not in want of linen and clothes, and every one is obliged to give place when they paſs along the ſtreets, and no ſick perſon can eaſily enter their houſes. Some of them are alſo not quite ſo ſuperſtitious, and therefore more cautious, nay, they even ſometimes perform a ſort of quarantine, either in their own houſes, or by moving into the country; and ſome would certainly perform it more rigorouſly, if they were not fearful of being deſpiſed, and called Frangi, or Europeans, by their more ſuperſtitious companions. But, if the infection finds its way into their houſes, they are as little exempt from it as the poorer ſort. I remember an inſtance in the year 1771, of every individual in the houſe of a great perſon dying by the plague, becauſe the maſter had bought ſome Mameluks from Conſtantinople.

Some authors have aſſerted, without endeavouring to account for it, that the Europeans reſiding in Turkey were not ſo much ſubject to the plague as the natives. But they have, perhaps, not ſufficiently conſidered, that even the very pooreſt of them take all poſſible care to avoid it; and that all thoſe who poſſibly can, perform a ſtrict quarantine.

rantine. And I remember ſome ſtriking inſtances where ſeveral of them loſt their lives from the leaſt imprudence: and indeed, what ground have we to expect, that they ſhould be leſs liable to the infection, ſince it is very well known that the plague rages with much more fury in other parts of Europe, when brought thither, than even in Turkey.

It has been obſerved in Turkey, and particularly in Egypt, that perſons of the age of ſeventy, and upwards, are not ſo much ſubject to the infection, and very old people not at all. The moſt vigorous and the ſtrongeſt appear to be moſt ſubject to it.

The Friars de Propaganda Fide, at Grand Cairo, alſo perform quarantine; but they always appoint two of their number to viſit the ſick, and to adminiſter extreme unction to thoſe of their perſuaſion who are dying: and it happens but ſeldom, that any of theſe viſitors die of the plague, which conſtantly inclines them to make a miracle of it. The only precaution they take is, to drink a great quantity of brandy, as much, and often more then they well can bear, without diſhonouring their profeſſion. A Venetian doctor, long reſident at Grand Cairo, never performed quarantine, and even viſited people who were ſick of the plague, but never caught it himſelf. His antidote was likewiſe to take ſo much brandy, that he was ſeldom free from its effects: perhaps the increaſe of perſpiration, occaſioned by the

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uſe of the liquor, might be the cauſe. It ſeems that brandy ſupplies, in this caſe, what a great degree of heat would naturally do. A timorous perſon, who is in conſtant fear and apprehenſion, will be much more liable to have it. It is well known that fear acts the contrary way, and will prevent or obſtruct perſpiration.

P. S. After I had written the foregoing ſheets, a friend of mine favoured me with a volume of the ſo called City Remembrancer, in which I found a long deſcription of the plague in London, in the laſt century; with various conjectures concerning the origin of this diſtemper, all of which pre-ſuppoſe a corrupt air. At the ſame time it is there ſaid that it had been brought from Holland. In another place it is ſaid, that all thoſe people eſcaped who ſhut themſelves up entirely from all connection with infected people. Quere: Did they not all breathe and live in the very ſame air? Many people were ſhut up and guarded in their houſes by order of the magiſtrate, becauſe they were infected. This could certainly be of no benefit to them, and muſt have been much worſe for thoſe who were with them.

Various experiments were alſo made to correct the ſuppoſed infected air, but acknowledged to have been without effect. One was, to make large fires here and there in the ſtreets and open places. But this ſeems to me almoſt as ridiculous, as throwing a few hogſheads of any liquid into the ſea, to purify the water of an extenſive part of it,

it, becauſe it is ſuppoſed to be corrupted. How can any one ſuppoſe that ſuch an inſignificant attempt ſhould be capable of purifying ſo large a body of air, which being almoſt conſtantly in motion, by means of the winds, cannot remain the ſame during only a very few minutes.

It is alſo maintained there, that the plague is nothing but a putrid fever in the higheſt degree. If this were true, then putrid fevers would commonly be the forerunners of the plague, which by degrees would degenerate into the former diſtemper; and from the influence of ſuch fevers nobody could be preſerved even by locking himſelf up. Neither is it obſerved that theſe fevers are more common in Turkey juſt before the plague than at other times.

Low and marſhy grounds, particularly in a hot climate, are commonly very unhealthy; as we ſee in Batavia, Scanderoon, ſome parts of Cyprus, &c. Here it muſt be allowed, that the air is corrupted or impregnated with putrid and pernicious exhalations; but why is it corrupted to ſuch a degree, that it ſeems to remain always the ſame? Becauſe the origin of the corruption is never removed, but there is a conſtant ſupply of putrid matter on the very ſame ſpot. We often ſee, that if there happen to be a hill, or a more elevated ſpot, at a very ſmall diſtance from ſuch places, the air is commonly found to be very different, and by no means infected. This is par-

ticularly remarkable at Bilan, near Scanderoon, may be obſerved in other places which are much nearer, and formerly was the caſe at Trieſte, before the low marſhes were filled up; the new town, then ſituated in the valley, was accounted exceedingly unhealthy, although the part adjoining to it, upon a hill, was quite the reverſe. But in ſuch unhealthy places, as obſerved above, it would be of no benefit to be locked up in a houſe; the diſorder occaſioned by the corrupt air would find its way into it, and attack thoſe as well as others.

A change of weather out of the common courſe, a mild and wet winter, &c. by which the air may be impregnated with various pernicious exhalations, may occaſion epidemical diſorders in our countries, which otherwiſe are accounted very healthy. But theſe diſorders vaniſh, as ſoon as the ſupply of the noxious matter ceaſes which was the cauſe of them; but during the time it continues, it would be of little uſe to perform quarantine in a houſe, though all other precautions may be proper; but as it is quite otherwiſe with the plague, the cauſe of it muſt be different.

The deſcription of the laſt plague in London, in the City Remembrancer, did, therefore, not at all alter my opinion, that the plague, for the moſt part, and particularly when it is brought from other countries, is not occaſioned by a corruption of the air; though at the ſame

ſame time it ſeems to be evident, that a certain ſtate of the air is requiſite for maintaining it, and another for ſuppreſſing it, otherwiſe we ſhould be inclined to think that it would never ceaſe in any ſeaſon of the year, when it had once begun in a place; though much might alſo be ſaid *pro* and *con* on this head. The diſorder might ceaſe, becauſe it had already ſwept away all thoſe who had a diſpoſition in their bodies to catch the infection; yet, as experience has ſhewn, that the infection does not take in Egypt at certain times of the year, this ſeems to argue in favour of the firſt idea, that the air muſt be in a ſtate to maintain it. But here a queſtion will naturally ariſe: *How was the plague at firſt produced? And what has been the phyſical reaſon of its origin?*

The ſolution of theſe queſtions is indeed involved in obſcurity, and it ſeems impoſſible to anſwer them by ſtating facts; we have alſo no ſuch particular and exact records of thoſe times, nor can we even ſay when it made its firſt appearance in the world; for when it is once produced, it is evident that it may be kept up by contact and negligence, by not taking proper care of thoſe things which may retain the infection. There is, however, room for probable conjectures, viz. a combination of various circumſtances may be neceſſary, which may, perhaps, not occur exactly in the ſame way, during the ſpace of thouſands of years: there may alſo be countries whoſe ſituation may make them incapable of ſuch a combination, though ſuſceptible

of the infection when brought there. We ſee this in ſome degree in every country. A fatal diſorder made its appearance among the Romans, and many thouſands died with ſneezing. Other diſorders, equally unknown before or ſince, made their appearance, proved fatal to many, and vaniſhed again, becauſe the combination of circumſtances, or even the particular circumſtance which occaſioned each particular diſorder, never occurred again exactly in the ſame manner. Such was the ſweating diſorder in England and other countries. So the ſmall pox, meaſles, and the like infectious diſorders, may originally have been produced, and may ſtill be produced in countries liable to ſuch combinations of things neceſſary for them, and be continued by contact, &c. Thus, likewiſe, diſorders of which we have not at preſent the moſt diſtant idea, might be produced, without having recourſe to miracles, which God may certainly make uſe of as often as he pleaſes, when he chooſes to deviate from the common courſe of nature once eſtabliſhed by him. I, for my part, find no reaſon to doubt that, if it were poſſible to make all nations, and all individuals of nations, perfectly ſenſible of the importance of a ſtrict quarantine, and of deſtroying every thing coming from people and perſons infected with the plague, this dreadful diſorder might, with many others of the infectious kind, be baniſhed out of the world. At the ſame time I look upon it as belonging to the diſpenſations of God, that this does not appear poſſible.

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In ſhort, the field for reflexion is ſo very extenſive, that we might eaſily loſe ourſelves by rambling too far in it; and I will therefore rather ſtop ſhort, leſt ſome of the faculty might admoniſh me not to go beyond my ſphere, as the painter did the ſhoemaker, when he began to criticiſe other parts of his picture beſides the ſhoes. But it is to the judgment of thoſe who make phyſic their profeſſion that I ſubmit theſe my unpoliſhed ideas, to determine how far they may be well grounded or not.

OBSER-

OBSERVATIONS ON

THE OVERFLOWING OF THE RIVER NILE,

AND THE QUALITIES OF ITS WATER.

THE river Nile is the treaſure of Egypt; without it this country would be the moſt dreary waſte imaginable. To be fully convinced of this, we need attend to thoſe parts of the country only, which, from their elevation, cannot be overflowed. Without it this country would be entirely uninhabitable; all its fertility, and all the ſubſiſtence of men and animals muſt be aſcribed to it. At the ſame time the Nile is the moſt convenient channel of communication from one extremity of the country to the other, being navigable for boats of conſiderable burthen, without any interruption from its two chief mouths, to the rapids near Aſſuan, and even above theſe rapids (for cataracts they cannot be called), through all Turkiſh Nubia; and, by all accounts, it might eaſily be made ſo to Sennar and ſtill higher up. This communication by water is, likewiſe, no ſmall advantage for the conveyance of merchandize from the Mediterranean

diterranean, and the produce of Upper Egypt to the capital. It is no leſs convenient for travelling, which is here chiefly performed on the river. I myſelf have made many a pleaſant journey upon it, though the very firſt did not prove ſo.* No part of the country is at any great diſtance from it, for even in Lower Egypt, where only the habitable parts ſpread to a conſiderable width, the river is divided into two principal channels, one turning to the eaſt, the other to the weſt. Egypt is, therefore, one of the moſt ſingular and

* In all other Turkiſh provinces, particularly thoſe in Aſia, which are often thinly inhabited, travelling is ſubject to numberleſs inconveniences, ſince it is neceſſary, not only to carry all ſorts of proviſions along with one, but even the very utenſils to dreſs them in, beſides a tent for ſhelter at night, and in bad weather, as there are no inns, except here and there a caravanſera, where nothing but bare rooms, and thoſe often very bad, and infeſted with all ſorts of vermin, can be procured. Should ſickneſs overtake a traveller, then his miſery is complete, particularly, as in ſome parts he may meet with no habitation for days together; to this may be added, that a traveller is often obliged to entruſt himſelf to guides, of whoſe language he is ignorant, conſequently he is entirely at their mercy. Though I do not wiſh to entertain the public with my private adventures, yet, as a ſpecimen of ſuch a journey, I will give an account of one which I made in the Iſland of Cyprus, and which, at firſt, may appear entirely fabulous although ſtrictly true. When I firſt went to Turkey, I landed on the above iſland, and was involuntarily detained for about ſix weeks at a very unhealthy place called Larnica, where all the Europeans reſide. Not being able to procure a paſſage from thence to Alexandria, I had ſcarcely been there four nights, before I was attacked with a violent intermittent fever or ague. As I wiſhed to leave this unlucky

and wonderful countries on the face of the globe: nay, I am very much inclined to think, that the exiſtence of the habitable part of it, depends entirely upon this extraordinary river. Several obſervations

lucky place as ſoon as poſſible, particularly as the Engliſh Conſul, and his clerk, with whom I lodged, were afflicted with the ſame diſorder, I ſent a meſſenger to a place called Limaſol, about fifteen leagues weſt of Larnica, where I heard there was a veſſel bound to Alexandria, to ſee if I could procure a paſſage. The next day a Greek arrived from thence with two mules, one for himſelf, and another for me. It happened to be the day for having a fit of the ague; but, as the guide could on no account be perſuaded to wait a day longer, and was myſelf very impatient to be gone, I diſregarded my diſorder, packed up my luggage as well as I could, and hired another Greek with a mule to carry it, with part of my proviſion for the journey. As this man had much the appearance of a villain, I charged a pair of pocket piſtols before his eyes, and placed them in my belt, to ſhew him that I was upon my guard: however, the circumſtances which followed would have prevented them from being of much ſervice, had not God himſelf protected me. Thus equipped, we left the place in the duſk of the evening; we had ſcarce proceeded a mile, before it began to rain very hard, and continued to do ſo the greateſt part of the night, accompanied with very vivid and frequent flaſhes of lightning and thunder. As I was obliged to pay the utmoſt attention to cover myſelf from the heavy rain, againſt which I was not well ſheltered in my Turkiſh dreſs, I threw a bed quilt, which I had placed upon my ſaddle, over my head, and was thus led on in a manner blindfolded, entirely at the mercy of my guides. After we had proceeded in this way about three or four hours, in a quite deſert plain, one of the Greeks, who had the charge of my luggage, and the greateſt part of my proviſions, ſmelled out a bottle of ſtrong liquors, of which he made ſuch free uſe, that he could no longer ſee his mule, which took the advantage to run back to the place from whence

ſervations, which I have made during my ſtay in this country, ſeem to favour this idea.

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whence it came with all its cargo; the other guide endeavouring to help him to catch it again, likewiſe forſook me; and, being ſo covered up, I did not immediately perceive it till after ſome time, when no longer I heard any one following me. I then uncovered myſelf, but it was ſo extremely dark that, except at ſhort intervals, by the lightning, I could not diſcover any object at a yard's diſtance. I ſtill thought for ſome time that I heard them at a diſtance. Not knowing immediately what to do, I diſmounted, and tied my mule, by the bridle, to ſome bruſh-wood next the path (for there was no regular road), and began to walk back, hoping to meet one of my guides; but ſoon recollecting myſelf, and ſeeing the improbability of ſucceſs, I returned towards the place where I had left my mule, moſtly feeling my road, except when I had a glance of it by the flaſhes of lightning; at laſt, when I got near my mule, it gave a ſudden jerk, got looſe, and likewiſe ran away; but as it had come from Limaſol, it followed that road. Now I had no other proſpect left but to remain in a deſert, in a ſtrange country, upon the ſpot where I was, and there to await day-light. After ſtanding a conſiderable time, I perceived, by the lightning, a man coming towards me, mounted upon an aſs, but I ſoon ſaw he was not one of my guides; upon approaching me, he muttered ſomething in Greek, but, ſeeing that I could not underſtand him, he left me and rode on. After a long diſagreeable ſuſpenſe one of my guides returned; but this man could not ſpeak one word of Italian, though the other could, and I not knowing Greek, could not enquire what was become of my luggage. He only aſked me, with ſigns, what was become of my mule? and I could do no more but to point the way it had run off. The poor fellow then diſmounted, and made me mount his mule, and walked himſelf by my ſide through deep mire, during one continued rain; after ſome time we perceived my mule, by the lightning, on the path before us, but he had a great deal of trouble to catch it. About midnight we reached a

1ſt. The whole ſurface of its inhabitable part conſiſts of the very ſame ſubſtance which the river leaves every year upon the fields, after its overflowing. This ſubſtance is compoſed of a very fine black mould,

place reſembling a village, where he knocked at a door. Never in my life was I ſo rejoiced to get under a roof; but when the door opened, I found it was only a ſhed, and quite open on the other ſide; but there was a fire, and ſome men were lying on the ground around it. They ſoon ſtirred it up, and I began to dry my clothes, and diſregarding my ague, eat and drank very heartily of ſuch proviſion as I had with me, but there was none among all theſe men with whom I could ſpeak a ſingle word. After ſome time the maſter of the premiſes made me a ſign to follow him, which I did, and he led me to a back building reſembling a room, gave me a large great coat, and ſhewed me a place where a clean ſheet was ſpread, and another great coat laid for a pillow, where I might take ſome reſt. Being worn out with fatigue, I was exceeding glad to find ſuch good accommodation, but ſoon perceived it was nothing but a large hard cheſt, with a ſheet ſpread over it; however wearineſs made me fall aſleep, and I ſlept pretty ſound till about eight o'clock the next morning, when my guide came in and made ſigns to proceed. I rewarded my generous hoſt as well as I could, and continued my journey, without being able to make any enquiry concerning my luggage. This day was extremely cold, being the 3d of January; what had been rain in the valley the night before, proved to be ſnow on Mount Olympus and the other hills, the ſea likewiſe was much agitated by the ſtorm in the night, and this proved very inconvenient to us ſoon after, for about three miles from the above village, the road went over the ſands of the ſea, the ſhore of the iſland being as ſteep as a wall: here the waves came continually rolling cloſe in ſhore, and our legs were every time in the water, for it often reached the bellies of our mules. As this laſted from morning, till about four o'clock in the afternoon, I almoſt began to give myſelf over for loſt, not thinking that I ſhould

mould, mixed with a little ſand, which is often upon an average ſeven or eight feet deep. I have ſometimes examined this mould, which the river leaves in great quantity in channels, and thought I found it

I ſhould be able to ſtand the wet and cold any longer; however, approaching the ſhore late in the afternoon, I plucked up my courage, with the idea of warming myſelf by walking as ſoon as I got clear of the waves; therefore, the moment this was the caſe, I diſmounted, and did my beſt, but ſoon found that I had not taken my exhauſted ſtate into the account; and after walking about two or three hundred yards, being unable to proceed, my guide was obliged to help me on my mule again, ſo we went on ſlowly, ſometimes walking a few hundred yards, then mounting again, till at laſt we arrived, about nine o'clock in the evening, at the houſe of a Greek, who acted as Engliſh Conſul at Limaſol. As he ſpoke ſome Italian, I could now for the firſt time enquire about my luggage, which he aſſured me would not be loſt, but would come the next day; and ſo it proved. My hoſt ſhewed me into a room with a clean double bed, and having ſome tea, and a kettle with me, I got him to boil water, and I made tea by tying ſome in a linen rag, and putting it into the kettle, which very much refreſhed me: however I got another fit of my ague that very night, but, contrary to my expectations, much ſlighter, and ſhould have reſted comfortably enough, if my bed, which was otherwiſe clean, had not been infeſted with innumerable fleas. I had to wait ſix days here for the ſailing of the veſſel, during which time I had the fits of the ague regularly every other day. At laſt we ſet ſail, and I arrived in five days at Alexandria. At ſea the fits of my ague left me, but it was not cured, for I ſuffered very much from it ſome time after. There were ſymptoms of the plague at Alexandria when I arrived, which ſoon became general; I therefore haſtened away, but had many other difficulties to ſtruggle with before I reached Grand Cairo.

When I left Cyprus, the Engliſh Conſul at Larnica, Mr. John Baldwin, gave me

it much leſs mixed with ſand than the common ſoil, and rather too tough to be very fertile, without ſuch a mixture; but when I conſider the ſmall quantity of it that remains on the open fields, as alſo the

a letter of recommendation to a Tuſcan gentleman, Mr. Marion, who acted as Engliſh Conſul at Alexandria. But this man being continually at variance with all other Europeans, I ſoon found that my recommendation was worſe than none; and I myſelf have not much reaſon to thank him for favours ſhewn in conſequence of it. All he did was to get me a lodging with another Italian, where, for good payment, I was tolerably well cared for. Feeling myſelf very weak, and finding the ſymptoms of the plague in the place increaſing, I was very deſirous to leave it ſoon, and therefore deſired Mr. Marion to procure me a Janiſſary who could ſpeak Italian, to take me for a certain ſum, board and paſſage included, to Cairo; this he promiſed to do. I ſtaid only one day to ſee the moſt remarkable monuments of antiquity, and left Alexandria the next morning at four o'clock, in an open boat, for Roſetta. I ſoon perceived that the Janiſſary, whom Mr. Marion had procured for me, knew nothing of Italian, except one or two quite common words. The wind not being fair, we ſailed heavily along the coaſt till we reached Aboukir Bay in the afternoon; here the wind turned ſtill more a-head, and became boiſterous, therefore all the coaſting veſſels, of which there were many, ran into the bay and caſt anchor for the night. As it was cold and rough, I pointed to the houſes or huts of Aboukir, and gave my Janiſſary to underſtand that I wiſhed to ſleep in one of them. He knew juſt ſo much of Italian as to ſay, *cattivi genti*, or bad people. Then he pointed to the boat, and told me, with ſigns, that I muſt ſpend the night there, for which he made a ſort of a tent over me with mats. This night proved very boiſterous, and I again had a fit of the ague; I therefore ſpent it very uncomfortably.* The next morning about ten o'clock,

* We were at anchor on the very ſpot where Lord Nelſon defeated the French fleet, a little within the rocky iſland on which they had their batteries.

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the little diſtance of the ſandy deſerts, from which the whirling ſouth-eaſt winds commonly ſcatter, every ſpring, a great quantity of ſand all over the country, I can eaſily account for the mixture. This wind,

the weather grew milder, and we ſet ſail, in company with ſixty-five coaſting boats, for the mouth of the Nile, which is quite on the other ſide of the bay. It is ſo broad, that when we reached the middle, we ſaw no land on either ſide, the ſhores being very flat; but this did not continue long, and the date trees below Roſetta ſoon began to appear as riſing out of the water. Here my Janiſſary took ſome of the water ſeemingly out of the ſea, which was ſweet; this ſhewed that we were near the mouth of the river. About three o'clock in the afternoon we entered it, and ſailed towards Roſetta, which is about ſix miles from the entrance. As Mr. Marion, for reaſons above-mentioned, could give me no recommendation to any of the Europeans reſiding there, I was at my arrival very much at a loſs to whom to addreſs myſelf. After much exertion to find out one of them, my Janiſſary at laſt pointed to a man walking at the river ſide, and ſaid, Conſul! I ſoon made up towards him; for, in the ſituation I then was in, I ſhould have rejoiced to meet even an European dog. When I came up and ſaluted him in Italian, he aſked me whence I came, and whither I intended to go; this being anſwered, he enquired if I had recommendations to any of the Europeans; I anſwered, no. He ſoon underſtood the reaſon, when I told him to whom I had been recommended at Alexandria. However, he gave me a very friendly invitation to his lodgings, and treated me, according to the cuſtom of the country, with coffee. Meanwhile my Janiſſary had embarked all my goods on board of another veſſel; which was to ſail up the river to Cairo, and had hired the cabin for me to ſleep in. As my new European acquaintance had left me for a ſhort time, and evening drew near, I began reflecting that I was not in a public houſe, and feeling myſelf very weak and exhauſted, I went towards the boat where my goods were embarked, meaning to go to reſt; but, coming near it, I found the ſame European walking

there

wind, as it is of a whirling nature, is capable of carrying the fine ſand far into the Delta; and what confirms me in this idea is, that the ſoil ſeemed to me by far leſs mixed with ſand in the middle, and loweſt

there, who, when he perceived my intention to ſleep in the boat, very generouſly invited me again to his lodgings, where he furniſhed me with an apartment with a very good bed, and likewiſe with board, at the Patres de Terra Santa, where he himſelf boarded.

The plague having broke out at Alexandria, they were at firſt afraid of me, thinking, as I was ſick, I might be infected therewith; but when convinced of the contrary, they became very cordial and familiar, and treated me with the greateſt hoſpitality for ſix days, till the wind, which was contrary, permitted us to proceed up the river. I afterwards became intimately acquainted with this Gentleman, whoſe name was Signior Aleſſandro Del Senno, a native of Piſarco in Iſtria, where I paid him an unexpected viſit, after my return from Egypt. The journey from Roſetta to Grand Cairo upon the river is commonly performed in three days, with any tolerable fair wind; but, in order to complete my misfortune, it was eighteen days before I reached that place. In the lower parts of the Delta it often rains very hard during the winter ſeaſon; this was alſo now the caſe. My Janiſſary had, in order to ſave ſomething, embarked in a very old veſſel, which was far from water-tight over head; the heavy rain, therefore, penetrated every where, ſo that I had not one ſpot where I could ſit dry, though under cover; my bed ſoon began to moulder under me, till at laſt I contrived to ſuſpend it with a cord, ſo that the penetrating water could run off underneath, which was of ſome ſervice. My guide had provided ſufficient, and very good victuals, for a journey of five or ſix days, ſuch as bread, fowls, rice, &c.; but as it laſted ſo long, all the bread by degrees grew mouldy, and the fowls were conſumed. He endeavoured to get ſome rice bread from the Arabs, but it proved very inſipid, and was as black and

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loweſt parts of the Delta. But there the river at preſent ſcarcely overflows its banks, and the ground may be improved by the rotten ſtubble of rice and other vegetables, and the pigeons dung, which is carried down in great quantities from Upper Egypt.

2d. The

as dirty as a coal: with ſome difficulty he procured ſome more fowls, but upon the whole we had very ſcanty fare; perhaps this was the reaſon that my ague again forſook me. We frequently lay to at a paltry village, or at anchor in the middle of the river for four, five, or ſix days together, and no offer could make them exert themſelves; they continually exclaimed: Min Allah! Mukkader! &c. It is from God! It is ſo written in the Book of Fate! &c. All this was the more irkſome to me, as I could not ſpeak a ſingle word with any one on board, not yet underſtanding Arabic. Once lying before a village, my Janiſſary ordered me by ſigns to charge all my fire-arms, of which I had two fowling-pieces, and a pair of piſtols; I did it, but never could learn the reaſon. At laſt we arrived before Bulac, the harbour of Grand Cairo, where, to finiſh in ſtile, the veſſel ſtuck faſt in the middle of the river on a ſand bank, and all the exertions of the crew could not move it. Here almoſt all my patience began to fail; I made many ſtrong ſigns to ſome boats which were in ſight, till one of them came, and took me on ſhore, where I immediately mounted an aſs, and was conducted by my Janiſſary to the ſtreet where the French merchants reſided, from whence a ſervant directed me to my friends Drs. Hocker and Danke, where I was moſt heartily welcomed. But though my ague had to appearance left me, yet I felt it within me during the whole ſummer following; and in November, when the air grew cooler and damp, it attacked me again with redoubled violence, for I had two fits of it every day; one laſted from ten in the morning to ſix in the evening, and the other from ten in the evening to ſix in the morning, though the latter was in a ſlighter degree. As this continued for nine weeks together, it brought me ſo exceedingly low, that both Dr. Hocker and myſelf,

2d. The large quantities of muſcle and oyſter beds, with other productions of the ſea, which are to be found under ground in various places, even not far from Grand Cairo, made me ſometimes think, that moſt probably the whole Delta was originally nothing but a ſhallow bay of the ſea, of unequal depth. I ſay ſhallow, becauſe wherever I have been on the ſea ſhore, the rocks appeared either very near, or above the ſurface in ſome places, which all ſeems to have contributed to enable the river to fill it up by degrees with the ſediment of its water, of which the whole ſurface now conſiſts, through which the river always found its way in ſeveral channels. Theſe channels have from time to time changed their bed, and varied in number, and theſe continual changes muſt be the reaſon why the ancient authors differ ſo much in their deſcriptions of them. It is alſo probable, that if it formerly were a bay, there may have been

ſelf, began ſeriouſly to deſpair of my recovery. However, it pleaſed God to reſtore me to health again, and though I had ſome ſlight fits of ſickneſs at other times, yet I was never again ſeriouſly ill, during all the time that I remained in the country, which was from January 13, 1770, to January 26, 1732, a period which will for ever remain memorable to me, on account of the many, and oftentimes very heavy occurrences, through all of which the Lord has graciouſly helped me, and has likewiſe preſerved my conſtitution from ſuffering any material harm, ſo that I am now at ſixty as well, and even better in health, than I was at twenty-nine, when I firſt went to Egypt. His name alone be praiſed for it!

I will not, however, detain my readers longer with the recital, as the above will be ſufficient to ſhew what travellers in Turkey, particularly in the thinly inhabited parts, are liable to.

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ſome iſlands with rocky foundations in it. Near Roſetta there ſeems to be a ſtriking proof that the country is ſtill encreaſing by the ſediments of the river; by every appearance it ſeems that Roſetta was formerly ſituated cloſe to the ſea, and at the very mouth of that branch of the river; for this town is ſituated on the weſt ſide of the river, under a rocky hill covered with ſand, which begins cloſe behind the town, and extends itſelf without interruption towards Alexandria. However, below this town, there is a long narrow neck of land, conſiſting of the ſame above mentioned black mould, on both ſides of the river, which at preſent removes the mouth of it at leaſt five miles from that city. The ſurface of the whole inhabitable valley that forms Middle and Upper Egypt, conſiſts alſo of the very ſame mould. This valley begins at Grand Cairo, and thence runs almoſt due ſouth as far as Aſſuan, the laſt town of Egypt towards Nubia, between two rows of high rocky hills. It is of very unequal breadth, but ſeldom more than from five to eight miles, and in many parts not near ſo much, except about Faium, or the ancient town of Arſinoe, where it widens conſiderably.

The courſe of the river is at preſent moſtly, and in many parts, entirely on the eaſt ſide of this valley, and though it often changes, at leaſt part of its bed, it ſeems that it has never moved conſiderably from the eaſt ſide, as the ancients made ſeveral cuts to ſupply the weſtern ſide with water, of which that, called Bacher, or Canal Joſeph, which begins in Upper, and runs through the greateſt part of

Middle Egypt, and empties itſelf into the Lake Mæris at Faium, is the moſt conſiderable. Having once ſailed for two days up this canal, I found it exceedingly winding, which I ſuppoſe has been made ſo on purpoſe, to ſupply a larger tract of land with water; though, on the other hand, I thought it deſtroyed, by this means, too much of the valuable ſurface of the land, which might have been ſupplied with fewer cuts and engines. At Grand Cairo the mountains begin ſuddenly to divide to eaſt and weſt, and thus make an opening for the famous Delta, which begins not far below it, where the river divides into its two capital branches, that of Roſetta and of Damietta. The river overflows but a ſmall part, and the nearer to the ſea, the leſs of this Delta, though the banks of it grow lower and lower towards the ſea.

The lower parts are at preſent all converted into rice fields, and as the growth of it requires the fields to be moſt part of the year under water, they are all ſurrounded with ſmall dams about two feet high, and then laid under water by means of wheels turned by oxen, commonly called the Perſian wheels, an infinite number of which is ſeen in all Lower Egypt. There are two kinds of theſe wheels, which are alſo in uſe throughout the whole of the other part of the country, partly to ſupply the defects of the river in ſome places, and partly to raiſe vegetables at the time when the river is loweſt. They are very ſimple, but anſwer the intended purpoſe very well, and I think the invention is very ancient. They are alſo made uſe of in the ſouth

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of France, Spain, and Portugal, and moſt probably have been brought from the Levant into thoſe countries.

The river Nile begins to riſe annually about the 17th of June, and this is commonly ſo regular, that it varies but very few days one year with another. According to the Cophtic æra, by which all accounts are kept in this country, the 17th of June is the feſtival of the archangel Michael, and has given riſe to a fable, which is firmly believed, as well by the Turks, as by the Cophts and other Chriſtians of this country, viz. That the angel on that day, throws a drop of water of ſuch a fermenting quality into the river, that it cauſes it to riſe to ſuch a height, as to overflow all the country. For this reaſon the 17th of June is called Nockta (which ſignifies a drop), by all the inhabitants of Egypt: and ſhould any one contradict this notion, he would be charged with groſs ignorance; as would alſo be the caſe were he to deny the merits of the prophetical well at El Garnaus, in Middle Egypt, which, according to their opinion, ſhews in the firſt months of the year, by a miraculous elevation of its water, to what height the river will riſe that ſeaſon.

Oppoſite to Old Cairo is the iſland of Rouda, if it may be called ſo, for at preſent it only becomes an iſland when the river is already much increaſed. At the upper end of it is the famous Nilometer in the middle of an old moſque. This has been ſufficiently deſcribed, and many good drawings have been taken of it by Norden and

others. It is like a large ſquare well, with ſteps quite down to the bottom on one ſide. There is a ſmall opening below to let in the water of the river. In the middle of it is an octagon granite pillar, divided into karats or digits. I had the exact meaſure of it, but loſt it among other things at ſea. It is in the whole twenty-four draw or Turkiſh ells, which as far as I remember, is not much more than ſo many feet. This pillar is ſupported by a large croſs beam, that lies on the top of it. The increaſe of the river on each day is, from the beginning of July, publiſhed in all parts of the town by public criers every morning; but they commonly conceal part of it, in order to have ſomething to ſpare, if the river ſhould fall an inch or two on another day, which is now and then the caſe. They likewiſe take care to have a great number of digits to give out the day before the canal, which runs through the town, is opened, on which day they often take a ſecond round on that account.

The river commonly riſes very regularly from two to four digits or inches in a day, but ſometimes it riſes a yard or more ſuddenly, and then on another day falls a few inches, which is in a great meaſure to be attributed to the ſtrong northerly wind at that ſeaſon. If it attains its full height, then the whole pillar of the Nilometer muſt be under water.

About the middle of Auguſt the river begins to overflow its banks, and about the end of September it reaches its utmoſt height, from which

which it begins to fall gradually. Should it happen to riſe ſuddenly to a very great height, but not remain long enough to ſoak the fields ſufficiently, it will not be a fertile year, and other bad conſequences may likewiſe follow if it leaves the fields too ſoon, before the air begins to cool, for many ſorts of vermin will breed in the ground which are pernicious to ſome kinds of vegetables.

As the river retires, the fields are ſown, which is ſooner or later, according to their reſpective elevations; for ſome fields are not free from water till the month of December, and, in ſome temporary canals, it remains ſtill longer. The canal Joſeph is never dry, though at its beginning it is very ſhallow, and therefore ſoon loſes the ſupply from the river. It is reported by the country people to have many ſprings, but this I could never fully aſcertain, and have reaſon to doubt their being of any conſequence.

The canal, which runs through Cairo, and from thence, by way of Matarea to Lake or Birket el Hadge, (which ſignifies the Lake of Pilgrims, ſo called, becauſe the pilgrims, which yearly go to Mecca, aſſemble there), is always cleaned as ſoon as the river begins to riſe; but a dam, or bank, is made acroſs its mouth at Old Cairo, which is not opened till the river has attained a certain height, which is commonly about the middle of the month of Auguſt, when it is done in preſence of the Baſha with great ceremony. Should the river happen not to attain the height neceſſary for opening

opening the canal, then the Grand Signior has no right to demand any revenue for that year. But it ſeems they have taken care to fix the height of the river ſo, that this cannot eaſily be the caſe; for, if it ſhould ſtop there, and riſe no higher, then at leaſt half of the inhabitants would periſh for want, as it muſt riſe a great deal more to make it a plentiful year. The day when this canal is opened, is always a day of great rejoicing among all claſſes of people, and indeed with great reaſon, as their whole welfare for that year depends entirely upon the ſufficient riſe of the river. Before this canal is opened, none is permitted to be opened in the whole country. The canal of Alexandria, which ſupplies that town with water all the year, and which begins at a village called Rachmania in Lower Egypt, is opened in the beginning of September; and a very large one, on the eaſt ſide of the Damietta branch of the river, is opened towards the end of the ſame month. When the canal of Alexandria is opened, they let it run waſte for three days before they turn the water into the ciſterns, in order to clear it firſt from all ſort of filth that may have collected there.

Near the mountains on the weſt ſide, particularly about Grand Cairo, and towards the Pyramids of Giza, the country is remarkably lower than it is cloſe to the banks of the river. This muſt, according to my opinion, have been occaſioned by the mud which the river has left next to the main ſtream in a greater quantity than it could well do at a greater diſtance. There have been ſeveral dams

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raiſed upon thoſe fields, to let only ſo much water flow upon the lower parts as was wanted to make them fertile, that they might not be drowned, nor too long under water, which from their ſituation they would be liable to. But, as theſe dams are very much neglected by the preſent government, the water often forces its way through, and runs at random wherever it can find a paſſage. Several remains of ſtrong old dams and locks ſhew plainly, that the ancients knew how to turn the overflowing of the river to much greater advantage.

About Grand Cairo ſeveral cauſeways are made to the next villages, which are ſeldom overflowed, as the difference of the encreaſe of the river, one year with another, is not much above two, or at moſt three feet: but it however ſometimes happens that they are broken down, and, in this caſe, there is no other way than to go in boats from one place to another; but the common people often wade for miles together, up to their middle, and often to their chin, from place to place, with their clothes upon their heads: indeed they frequently meet with places where they are obliged to ſwim, at which they are very expert.

For the building of a village the moſt elevated ſpot is commonly choſen, and if no ſuch is to be had, they keep the water out by dams, for which the common black mould is exceedingly proper; for, though it ſhould be ſoaked quite through with water, it will not eaſily

eaſily become mud, but retain a firmneſs fit to reſiſt any thing. I have often been ſurpriſed to ſee how ſmall a dam, made cloſe to the river ſide, was capable of keeping a body of water of two feet deep, perfectly out of the fields, as the Indian corn, and different vegetables, are not then ripe. When the river begins to cover the fields, in order to preſerve thoſe things, they are under the neceſſity of making dams round ſuch fields to keep the water out; but they commonly make them ſo very ſlight, that the farmers are obliged to watch them both night and day; nay, ſo very careleſs are they, that I once ſaw an Arab lie down and ſleep in a ſmall breach, which he had ſtopped up ſeveral times before, thus ſubſtituting his body for part of the dam. But ſometimes the river riſes ſo rapidly, and to ſuch a height, that all their endeavours are in vain, and all ſuch vegetables are deſtroyed: but it is a loſs for a few individuals only, which is amply compenſated in the whole, by the river overflowing ſo much more of the country in other parts.

When the river is at its greateſt height, the villages, which are commonly ſurrounded with a grove of date, and other fruit trees, appear as ſo many iſlands in an extenſive ſea, which is in ſome places broader than the eye can reach: this is a delightful proſpect. With the water, millions of ſmall fiſhes come upon the fields, with an incredible number of ſmall frogs, which are never ſeen in any other ſeaſon of the year. Now, as all theſe creatures muſt inevitably periſh as ſoon as the water retires, one might imagine that this would occaſion

ſion ſuch an intolerable ſtench as to corrupt the air; but the all-wiſe Creator has alſo provided againſt this: for, juſt at the time when the water begins to ſubſide, ſuch an immenſe number of various kinds of water-fowl make their appearance, that the edges of the water are conſtantly lined with them, and they conſume every thing of the kind, ſo that with the moſt diligent ſearch I could never find any dead frog or fiſh, though there was before ſuch plenty of them in the water, that they might be caught every-where with the hands.

The Nile is not a rapid river; however it often carries away whole iſlands and villages: for, as no means are uſed to ſtrengthen the banks of the river, the water commonly undermines thoſe parts where a ſudden winding of the river gives a turn to the current, which occaſions the upper part to fall into the river by degrees, where it is ſoftened and carried along with the ſtream. Thoſe iſlands are particularly in danger which the river itſelf has made, and which have commonly no other foundation than a looſe ſand, which, in proceſs of time, acquires a deep ſediment of the common black mould. The current takes away from one place, and adds to another: nay, wherever it finds the leaſt reſiſtance, as perhaps a ſunken boat, a piece of timber, or a ſtone, it will immediately throw ſand againſt it, and in time form whole iſlands of many acres, which are by degrees covered with black mould, and by theſe means made capable of producing all ſorts of vegetables. During my ſtay there I ſaw various changes of this kind: I obſerved large iſlands entirely carried away, and others

appear inſtead of them: again, others have been joined to the main land by filling up one of the channels. The firſt year ſuch new made iſlands were, perhaps, juſt viſible when the river was low, and conſiſted entirely of a fine looſe ſand: the next ſeaſon they had encreaſed ſeveral feet in height, and often very much in extent, and a ſmall mixture of black mould was obſervable on the moſt elevated parts, which made them capable of producing water melons. The next year common reed would begin to grow here and there, which helped them greatly to gather new ſubſtance; and thus they kept encreaſing from year to year, till they became delightful fertile ſpots, and one would have thought they had been there ſince the creation. They remained in this condition till, by ſome other change in the banks of the river, the current was directed againſt them, by which they would be carried away, if not all at once, however in a very ſhort time. Thus I have alſo ſeen villages carried entirely away, which did not even ſtand cloſe to the banks of the river, at the time when I came firſt there; and I have ſeen others that were ſituated cloſe to the water ſide, conſiderably diſtanced from the river by accidental addition of ground.

When I thus noticed what large pieces of ground were yearly carried away, and of courſe removed towards the ſea, and conſidered that this muſt have been the caſe from the firſt exiſtence of the river, it ſeemed to me a very ſtrong argument in favour of the above mentioned opinion, that perhaps the greateſt part, if not the whole of the

the Delta has been thus produced, and muſt be ſtill encreaſing by an encroachment upon the ſea; for ſomething muſt alſo be allowed for the immenſe quantity of ſand, and black mould, carried out into the ſea. This cannot well go to a great diſtance, for the colour of the water is not obſerved to be different from that of common ſea water at a ſhort diſtance from the mouth of the river; neither can the mould and ſand be annihilated, but muſt remain ſomewhere. As a further proof of the Delta being thus produced, it might alſo be added, that no monuments of very great antiquity are to be found in theſe low places, but only on ſome few elevated ſpots, and even theſe few do not ſeem to be ſo old as thoſe found in the upper parts of the country.

Some authors have aſſerted, and others have upon their credit repeated, that the water of the Nile is, juſt before it begins to encreaſe, of a green, and when it is at the higheſt of a red colour: but, I muſt confeſs that, though the inhabitants of Egypt alſo call the water of the river, when higheſt, *moye*, or *ma achmar*, which ſignifies red water, yet I could ſcarcely, with all the power of imagination, diſcern any of theſe colours. Juſt before the river begins to encreaſe it is always cleareſt, and of a whitiſh hue, much like the river Rhine, mixed with a few earthy particles; and, as the river riſes the earthy particles encreaſe of courſe alſo; and, being of a dark or black brown colour, the water appears ſo too.

From the beginning of March to the middle of June the river contains a vaſt quantity of little worms about one-fourth or one-third of an inch long, particularly near the ſhore; but they are quite inoffenſive, if even drank in great quantities with the water, though it is more pleaſant when filtred through a cloth, or a fine ſieve, on that account.

All the Europeans ſettled in Egypt will confirm, that the water of the River Nile is the beſt for drinking that can be procured any where; and I ſhould for my part prefer it, even when impregnated with earthy particles, to the cleareſt water of any well or ſpring which I have ever taſted. It is exceedingly light, increaſes perſpiration, is very wholeſome, and particularly when the river is higheſt, it is quite delicious. It is true the Arabs commonly call the prickly heat, *Hamoun el Nile*, becauſe it commonly affects people moſt in that ſeaſon when the river is high; but this cannot be attributed to the effect of its water, but to the degree of heat at that time, as is every where the caſe, and common in hot climates where the Nile water is not drank.

It is cuſtomary, at Grand Cairo, to fill large jars with Nile water, in which it will ſettle very ſoon, and become quite clear and fit for uſe. If the inhabitants wiſh to make it ſettle in a few hours, they put a few pounded almonds, or peach kernels, into it, and ſtir them together, and this is found to anſwer the purpoſe exceedingly well.

They

They have a particular way to cool the water, which is well worth taking notice of. They have a ſort of earthen bottles made of a ſandy clay, and ſo porous, that it always lets ſome of the water through, at leaſt ſo much of it as will keep the bottles conſtantly wet on the outſide: for theſe they have a ſort of frame, in which they place a number of theſe bottles, filled with water, into holes made on purpoſe to receive them, and thus they expoſe them as much as poſſible to the air. Under this frame a water proof veſſel is put to receive the droppings, which are thrown away, though they are by far the cleareſt part of the water by being filtred through the bottles. This frame is expoſed to a current of air in the ſhade, if any can be found. By the air playing upon the bottles, the water within will become, by many degrees, colder than the air that occaſioned it; nay, if ſuch a bottle is only expoſed to the wind and placed in the open air even with the burning ſun ſhining upon it, the effect will be the ſame, but in a leſs degree Theſe bottles are differently ſhaped, but the moſt common are of two ſorts; one with a narrow neck, thus ó and the other formed thus ȣ which is wide above, with a partition in the neck of it, into which ſeveral ſmall holes are made; and what is particular, if the laſt are filled quite to the top, the water above the partition will never grow cool, while that below is as cool as you could wiſh. By this ſimple method they can have very freſh water without the uſe of ice or ſaltpetre; but as ſoon as the pores of theſe bottles are ſtopped up, ſo that they remain dry on the outſide, they will be of no ſervice,

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as the water will not cool, but grow warmer, in them. The beſt of theſe bottles are made at Kema, in Upper Egypt, and are of a light blue clay. Some are brought from Mecca of the ſame colour, which are highly eſteemed, perhaps partly from ſuperſtition; though it muſt be allowed that they are very good, and the workmanſhip is far ſuperior to thoſe made in Egypt. Their ſize is very different, and vary from a pint to ten or twelve quarts.

Though moſt of the wells about Grand Cairo are brackiſh, yet there are ſome with excellent water: but Nile water is, however, always preferred where it can be had.

The water of the Nile never becomes putrid, nor ſhews any ſigns of fermentation. This can every year be proved by the many lakes filled with it about Grand Cairo, as alſo by the numerous ciſterns both there, and more particularly at Alexandria, in which the water is kept from one year to another. It may be kept in a veſſel in a houſe any length of time; no alteration can be obſerved, even if it is quite dried up. I myſelf brought a ſmall bottle of it to Europe, which I left in a muſeum in Saxony, and which never has ſhown any ſigns of fermentation: it is, therefore, the beſt that can poſſibly be procured for voyages. As ſoon as the river begins to retire, ſo that the lakes and ciſterns loſe their ſupply, they will ſmell for a few days a little muddy: but after this the earthy particles ſoon ſubſide, and the water becomes and remains quite clear, keeping perfectly

ſweet

ſweet as long as there is a drop left: and I have often been ſurpriſed to ſee, that even the conſtant waſhing in the lakes about Cairo made no alteration in this reſpect.

This obſervation will, I hope, contradict entirely the idea, that the plague was occaſioned by the putrefaction of the ſtagnant water which the Nile leaves upon the fields after the inundation; but another convincing proof of the inoffenſive quality of the Nile water is the following:

It is well known that almoſt all thoſe countries where rice is cultivated, the fields of which muſt of courſe be under water, are very unhealthy, and that agues are no where more common than in them; but this is not at all the caſe here: even in the midſt of the innumerable rice fields, in Lower Egypt, agues are not complained of, either by the natives or foreigners, and they are upon the whole very rare in Egypt: but there are two valleys about three days journey to the weſt of Upper and Middle Egypt, commonly called the Oaſſis, or, in Arabic, El Wach, which are both under the government of this country. The ſouthernmoſt is the largeſt, and has, according to the report of ſome of my friends who have been there, five villages, and ſeveral ſprings, and among them one is hot, which forms a ſmall rivulet that loſes itſelf in the ſand: this valley is called El Wach el Kebier, or the great Wach. The chief produce of it is dates, and a great quantity of apricots, and ſome other fruits, beſides ſome wheat.

This

This valley is very healthy; but in the other valley which is more to the north, there are alſo ſome ſprings that form a ſmall brook, which likewiſe loſes itſelf in the ſand. This valley is called El Wach el Sogeir, or the ſmaller Wach, wherein a great quantity of rice of an inferior quality is raiſed. The fields are laid under water by the ſmall brook. Here the inhabitants are never free from agues. This muſt certainly be occaſioned by the quality of the water, as the country is otherwiſe as dry, if not more ſo, than any other on the borders of the Nile.

I remember to have read, in ſome ancient authors, that ſalt might be made from the water of the Nile, and that all the ſalt uſed in Egypt was procured from it. They ſeem to have had ſome grounds for this aſſertion, though it requires explanation, as the common water of the river will produce none. The fact is this: the ſalt-pits are all near the ſea ſhore, and moſtly about Roſetta, and but very little elevated from the ſurface of the ſea. All the ground in their vicinity is entirely impregnated with ſalt, which is every-where diſcernible in ſummer, in the fields and gardens, ſo that even the river, when it is loweſt, becomes a little brackiſh ſeveral miles up the country, though there is not the leaſt tide obſervable from the ſea. Here they have ſalt-pits, where they let the water of the Nile in when high, by which the ſalt is drawn out of the ground, and found in great quantities after the water is dried up by the heat of the ſun: it is of very good quality. There is alſo rock ſalt to be found in Upper Egypt,

Egypt, of which I once ſaw a very large piece, but it was of a bluiſh hue, and a little bitter.

Now it is well known that all thoſe countries which abound in natural ſalt-pits, ſuch as Cyprus, and ſeveral other Greek iſlands are exceedingly unhealthy; but this is by no means the caſe at Roſetta. On the contrary, it is one of the moſt healthy and moſt agreeable ſpots in all Egypt. May not this be in a great meaſure attributed to the water of the Nile?

The river Nile is but indifferently ſtocked with fiſh. I will not pretend to deſcribe all the ſorts it contains. Of thoſe which are fit for the kitchen I know but three different kinds, which are very good. Theſe are called by the natives, buri, bolti, and keſher; all the other various ſorts are but indifferent. Thoſe millions of little fiſh, that make their appearance when the river overflows its banks, ſo that all the water in the fields, and every pond, is filled with them, are, unleſs in that ſeaſon, ſeldom or never ſeen. They are not larger than common anchovies, and are properly of two ſorts. The one is called rajah, the other beſſari. They are at that time both very good eating when fried, but the former is the beſt; it is diſtinguiſhed from the other by being a little broader, and they have a few red ſpots on their fins. This ſort grows to the ſize of a ſmall herring, but then they begin to be diſagreeable on account of the innumerable ſmall bones, which are not obſervable when they

are ſmall. The country people ſay they are bred by a fiſh in the Nile called bunni, to which, indeed, they bear a reſemblance. At the mouth of the river Nile there is a great plenty of fiſh, and alſo a greater variety, becauſe many ſorts come into it from the ſea, but do not go ſo far up as Grand Cairo. There are great fiſheries, both at Roſetta, but more particularly at Damietta, the chief produce of which is the above named buri, which is ſalted and exported to many other parts of Turkey. Its roe is the well known butargo, which is highly eſteemed all over the Levant. This fiſh is commonly from two to four pounds weight. I alſo once ſaw a ſort of a torpedo that was caught in the river Nile near Cairo; it was an ugly ſhaped clumſy fiſh, about two feet and a half in length: the effect of its touch ceaſes with its life. The canal Joſeph is alſo very well ſtocked with fiſh, but they are moſtly of thoſe ſorts which are common in the river Nile. Some very good eels are alſo found in moſt parts of the country.

The crocodile is moſt common in Upper Egypt, and the further you proceed up the country the more numerous they are. They very ſeldom come as far down as Cairo, and never below it. The country people pretend that it is by virtue of the mikias, or nilometer, that they cannot deſcend any farther, and that it contains a taliſman which prevents their going any farther; but the reaſon is, the vaſt number of boats that are continually ſailing up and down the river between Roſetta, Damietta, and Cairo, ſo that they could not harbour there without diſturbance: and as theſe boats are much leſs numerous above

above Grand Cairo, and fewer ſtill farther up, thoſe animals are more undiſturbed, and leſs perſecuted. Some few ſmall ones, about five or ſix feet long, were caught a little above the town of Cairo during my reſidence there, which I ſaw alive. I obſerved two ſorts of crocodiles, though I queſtion whether the difference did not conſiſt in the ſex only. The one is, in proportion to its thickneſs, rather longer than the other, but it conſiſts more in the tail; and of this ſort are all thoſe which I have ſeen in the muſeums at Florence, London, and ſome other towns in Europe. The other ſort is by far more bulky, and the ſkin much rougher. I brought the ſkin, ſtuffed, of one of the latter with me, which is to be ſeen in a muſeum at Barby, in Saxony; and this was by far the largeſt which I have ſeen in any muſeum, particularly in circumference. In length it meaſured near ſixteen feet.

The Nile horſe is ſeen in the uppermoſt parts of Egypt only, and this for the ſame reaſon as above obſerved. That theſe animals abound much more in other parts of Africa, I gueſs by the immenſe quantity of corbages made, as I am informed, of the ſkin of this creature, and which are yearly brought to Grand Cairo by a caravan of blacks, who come from the inner parts of Africa, and who are called Julape, and the country they come from is called Tarfur. Theſe corbages are a ſlice of half cured leather, cut out of the ſkin about a yard and a quarter in length, and about an inch in diameter,*

* The ſkin of the animal is on the back nearly an inch thick, and by cutting a ſlice out of it a little broader, and beating it ſideways, it becomes that ſize.

which is the thickneſs of the ſkin on the back of the animal. They are uſed in Turkey to give the baſtinado with upon the ſoles of the feet, and to beat carpets, &c. The outſide of the ſkin correſponds entirely with that which I have ſeen of the Nile horſe; but the ſkin of an elephant alſo does not differ much from it. Though I was myſelf acquainted with the leader of this caravan, who always told me they were made from the ſkin of an animal that lived in the water, yet I could never rightly learn whether they came from the river Nile, Niger, or ſome other large river, as he ſpoke but very imperfect Arabic, and perhaps knew no other name for it than El Bacher, which ſignifies both a river and a ſea.

The cauſe of the annual overflowing of the river Nile is no longer a myſtery; and we need not amuſe ourſelves with the many ridiculous fables of the ancients. The regular or tropical rains in Abyſſinia, where this river takes its riſe, which always ſet in at the beginning of June, and laſt to the end of September, is fully ſufficient for this. Sometimes the rains commence as early as the middle of May, but in June they become more general and regular. It rains every day about three or four hours, and that commonly ſo violently, that it fills a tub of one foot diameter with 15 lb. of water in one hour's time, according to the obſervations of Mr. Bruce. This muſt make an enormous quantity of water upon ſuch a large ſurface of country, which, except the ſmall part of it that may ſoak into the ground, is all conveyed through innumerable natural and temporary rivers and rivulets into

into the river Nile, as the only one of conſequence in that part of Africa, by which it can find its way into the ſea. Upon the abundance of this rain depends the whole fertility of Egypt, and the welfare of its inhabitants. By this they may always know, near a year before-hand, what harveſt they have to expect, becauſe this country is not ſubject to the many accidents, which ſo often deſtroy the moſt promiſing proſpect of a good harveſt in European countries: no continued rain, nor any hail of a deſtructive kind is ever ſeen, nor can any great drought have an effect upon it. It is true the country is ſometimes viſited by locuſts, but it is ſo very ſeldom, that I have only once in twelve years ſeen the air ſo filled with them, that they almoſt darkened the ſky; but this is merely upon their paſſage, and at ſuch a time of the year, when they can do little or no harm. The only thing capable of doing any injury, as far as I remember, is a certain worm that breeds in the earth after the river has left the fields. This worm deſtroys the roots of clover, which is the only food for cattle; but one cool night commonly deſtroys them all, and they are found upon the ground rolled together, where they become a prey to the birds. Juſt before the river overflows the fields, there is a great number of mice upon them, which find a good ſhelter in the very deep crevices of the earth, where they feed upon the remaining ears of corn, after the harveſt, for before that time few or none are ſeen in the fields. Theſe mice would certainly multiply amazingly, did not the river annually deſtroy millions of them in thoſe very crevices

vices which gave them ſhelter. Beſides this, the innumerable hawks, of all ſorts and ſizes, devour a great number of them, ſo that there is never any reaſon to fear much damage from them.

This being the caſe, the inhabitants of Egypt might be always free from famine or ſcarcity; for one very fertile year will produce a ſufficiency for two years conſumption, and in caſe of neceſſity, they might in good time import from other countries all that they ſo long before-hand know they may want. They might alſo in various ways, and with very little expence, improve nature; they could eaſily build mills or engines, by means of which the whole country might be laid under water, if the river ſhould not riſe even to half its uſual height, or ſcarcely at all. Theſe engines might be worked by wind, which in that country hardly ever fails for ten days in the courſe of a whole year, and much leſs in that ſeaſon.

Another conſiderable improvement might be made, which would be more expenſive, and not ſo ſoon accompliſhed, for it might, perhaps, require ages before it could be quite completed: but I do not in the leaſt doubt that it would anſwer exceedingly well, and be very profitable in the end. This is by fortifying the banks of the river throughout its whole length, and by confining it into a narrower channel, which might be ſo far eaſily done, as it is not a rapid river. By ſuch means a very conſiderable piece of valuable ground might be obtained,

obtained, and not a quarter of the water would be required to overflow its banks; for at preſent the bed of the river is by much too broad to convey the water to the ſea when it is low: it would certainly be a great undertaking, but I have no doubt of the poſſibility of it. The ground gained would, according to my opinion, alone pay for every foot of thus fortifying the banks, particularly, as very good ſtones may be got every-where, at no great diſtance, and as the river runs very often cloſe to the rocky mountains on the eaſt ſide, the parts on that ſide would not be in want of it, but ſtones might be brought from ſuch places by water down the river, to any place where they might be wanted. Beſides the ground which would be gained, there would be the general advantage of having all the country overflowed with much leſs water. In ſhort, a vaſt number of other improvements might be made to convert this whole country into a moſt delightful garden, where nothing would be wanted to make life comfortable and agreeable, and to effect a proportionable increaſe of its commerce, for which no country in the world is ſo excellently ſituated. But alas! to accompliſh this, the conceptions of its preſent inhabitants are too limited; the avarice and tyranny of thoſe in power is too great; they think no further than of the preſent, and it is even a ſaying among them, "We are all made for the ſword; let us enjoy what we can to-day, for who knows who will live till to-morrow." In conſequence of this their artiſts loſe all courage for improving themſelves; the ſon does the very ſame as he

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ſaw his father do, and on account of injuſtice and oppreſſion, no European artiſt is eaſily tempted to aſſiſt them; thus this bleſſed country, which otherwiſe would poſſeſs ſuch ineſtimable natural advantages, muſt loſe them all through the bad management of its inhabitants, of whom the poorer ſort muſt always be content to drag on a wretched exiſtence, and even ſometimes periſh for want, in the midſt of an earthly paradiſe.

OBSERVATIONS

ON THE CLIMATE AND SEASONS OF THE YEAR IN EGYPT.

THERE is ſcarcely a country on the globe, where the climate is ſo very regular as it is in Egypt. This has no ſmall influence upon the conſtitution of its inhabitants; and on this account it is not uncommon to ſee people one hundred years old, and there might probably be a ſtill greater number of ſuch, if they did not deprive themſelves of this benefit by their irregularities. I have myſelf ſeen a man who was reckoned to be one hundred and thirty years of age; and though moſt of them cannot prove their age by authentic records, yet you may form ſome probability of the truth, when you hear them relate that they were preſent at ſuch or ſuch revolutions, as was the caſe with this man.

The ſeaſons in Egypt may very properly be divided into ſpring, ſummer, autumn, and winter, as with us, with ſome ſmall difference only. Spring may be reckoned to commence at the beginning

of February, becauſe from that time the air grows conſiderably warmer. Thoſe kinds of trees, which annually change their leaves, begin now to ſhew new ones, and the fruit trees of the ſame kind are all in bloſſom. Barley is commonly ripe towards the middle of March, and wheat begins to be ready for the ſickle about the firſt quarter of April; and towards the end of the ſame month, all thoſe ſorts of grains are commonly gathered. The earth does ſtill retain ſo much moiſture, that after the wheat is got in, a crop of ſafflower (which is a baſtard ſaffron, and an article of commerce there, uſed for dying ſilks) may be raiſed from the ſame fields.

The common ſummer heat is very regular from about the middle of June to the end of September, and this may, therefore, be called ſummer. During that time, until the river begins to overflow its banks, all the fields are burnt up, and look like a dry deſert, upon which not a green leaf is to be ſeen, except where it is artificially watered. Towards the end of September the ſcene is entirely changed, and the whole inhabitable part of the country appears like an open ſea, interſperſed with as many little iſlands as there are towns and villages.

At the beginning of October the intenſe heat begins to decreaſe conſiderably; the Nile retires into its bed, and towards the end of this month, thoſe trees, which annually change their leaves, drop the old ones. As ſoon as the river retires from the fields, they

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are ſown with all ſorts of grain; at the commencement of November, they begin to be green, and towards the end of the year the face of the whole country reſembles a delightful meadow, diverſified with various lively colours. It ſeems, therefore, natural to call it autumn from the middle of October to the end of November; and from this to the end of January might be called winter.

The difference between the greateſt degree of cold and the greateſt, or, more properly, the moſt uſual heat in ſummer, does not exceed thirty degrees, according to Fahrenheit's thermometer. The room in which I made my obſervations, was in an upper ſtory of the houſe; where, on account of the Turks being uſed to handle every thing they ſee, I kept my thermometer, which was one by Ramſden, in a bureau, not far from a large window. By this I ſaw, that the moſt common ſummer heat was from ninety to ninety-two degrees, from which it varied but very few degrees even in the nights. The loweſt degree in winter was very regularly from fifty-eight to ſixty, in the ſame room where no fire was ever kept. There are, indeed, now and then ſome exceptions, but they are rare: thus it happened on the 17th of June, 1778, that the thermometer roſe and ſtood, even in the night about 11 o'clock, at 112 degrees, and a thermometer with ſpirit, that was placed for a trial on the top of the houſe, burſt on that day; but this laſted properly but one day, though it was exceſſively hot for two or three days. It unluckily happened, that juſt at that time a large caravan from Suez to Cairo, laden with India

goods, was plundered by the wandering Arabs; the paſſengers, conſiſting of Engliſh, French, and Dutch, were all ſtripped naked in the deſert, and being thus expoſed to the violent heat of the ſun from above, and the reflection of it from the hot ſand below, deſtitute of water or any other liquor, eight of them periſhed moſt miſerably, and only one Frenchman, Mr. St. Germain, arrived in a moſt deplorable condition at Grand Cairo, where he recovered and returned to France ſome time afterwards.*

So it may alſo happen that the thermometer falls ſome degrees below fifty-eight, but it is very ſeldom. During the twelve years of my ſtay there, it never came any thing near the freezing point; and that this muſt be ſomething very extraordinary, may be ſeen by the following anecdote, which I had from an old European merchant, who told me, that it really happened many years ago: that a little ice was found in ſome ſmall ditches about the town, and the Arabs, who had never ſeen any thing of the kind, brought ſome ſmall pieces for ſale to the European merchants, as they obſerved that they were fond of buying all ſorts of curioſities. In my time it never was ſo cold as to occaſion a white froſt, and ſnow I never ſaw till I returned to Europe; as therefore the degree of heat and cold varies but very little from what is mentioned above, it may be taken for

* Mr. Volney ſays this happened in January or winter. But having kept a regular diary of all ſuch occurrences, during the twelve years of my ſtay in that country, I commonly have been very particular to mention the days of the month.

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the ſtandard at Cairo. By the obſervations made by one of my friends at Alexandria, I found that the thermometer ſtood commonly two degrees lower there on the ſame day; and at Minie, in Upper Egypt, it was two degrees higher.

The moſt predominant wind in Egypt is due north, and it may be aſſerted with truth, that it blows, at leaſt, three quarters of the year. Every attentive traveller may obſerve this immediately, upon entering and ſailing up the river Nile. He will obſerve that all the trees, particularly thoſe with ſlender branches, lean not only with them, but with the whole trunk, very perceptibly to the ſouth: nay, even ſtrong trees, ſuch as the ſycamore fig, cannot reſiſt doing the ſame where they ſtand alone. This is particularly ſeen on the banks of the river, in ſailing from Roſetta up to Grand Cairo. It is not a ſlight breeze, but a ſteady, fine, and ſtrong blowing wind, eſpecially in ſummer. It is of very great advantage to the country. From the end of May to the end of September, there is ſeldom any other wind; and even in the following months it is the moſt predominant. As it is commonly the ſtrongeſt and leaſt variable wind in ſummer, ſo it is alſo then the moſt beneficial: as it very forcibly keeps back the water of the river, it contributes to its overflowing, and is very advantageous for boats to ſail up againſt the ſtream, which they do with amazing ſwiftneſs. It is by far more difficult at that time, to go with the ſtream down the river than up; and I have often been obliged to lie to, for days together, not being able to proceed with

with the ſtream. This wind is ſo cool in ſummer, that it is ſometimes neceſſary to add ſome cloathing, notwithſtanding the great heat and power of the ſun. It is the moſt agreeable, as well in ſummer, becauſe it is cool, as alſo in winter, when it is by far the warmeſt, and the air is delightfully ſweet when it blows. It is moſtly due north, but it now and then varies a few points; and as ſoon as this is conſiderably either eaſt or weſt, and particularly when eaſt, it feels diſagreeable.

The ſouth wind is moſt common in winter and in ſpring; but it ſeldom laſts more than two or three days at once, and commonly changes to the north. In winter, that is from the beginning of November to the end of January, it is by far the coldeſt wind, and of a very penetrating nature. It is always diſagreeable, and makes the body feel heavy. It is moſt diſagreeable when it blows from the middle of February to the end of May, for then it begins to be very hot, and frequently feels as if it came out of a furnace or oven. In ſpring it often changes to ſouth-eaſt, and then it is of a whirling nature, filling the atmoſphere with ſuch quantities of ſand and duſt as to make it almoſt totally dark. I once remember being obliged to light a candle at noon on ſuch a day, as the ſky was at the ſame time covered with thick clouds. This kind of wind always feels intolerably hot, though it is found by the thermometer, that it bears no compariſon with the common ſummer heat. The reaſon why it is cold in winter and hot in ſpring, can be nothing elſe but the

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exceſſive large ſandy deſerts to the ſouth and ſouth-eaſt, which in the longer winter nights are very much cooled, and after that time much heated by the power of the ſun. The natives call the ſouth wind Meriſi, and the ſouth-eaſt wind Aſſiab or Chamſier. This laſt word is derived from filthy, becauſe this wind commonly blows in the fifty days between Eaſter and Whitſuntide. The Italians call it Sirocco. When this wind has blown for two or three days, it frequently changes very ſuddenly to a north wind. This is commonly firſt perceptible by its effect upon the human body, by a freer reſpiration, and preſently after it ſeems as if the whole atmoſphere was in a convulſion, the north and ſouth wind fighting together, till the former gets the better of the latter, as is always the caſe, and then the whole ſcene is changed in a very few minutes; the air is cooled all at once, juſt as it is after a heavy thunder-ſtorm in this country, when all the duſt and ſand vaniſhes. As long as the ſouth-eaſt wind blows, there is no better method of defence, than to ſhut up all the doors and windows as cloſe as poſſible, and even to draw the curtains, for a dark room will always remain cooler: but let a room be as cloſe as it will, ſome of the fine ſand and duſt will find its way in, and be perceptible every-where. This wind is of an exceſſively dry nature, and all ſorts of wooden furniture, though ever ſo well ſeaſoned, are liable to crack and be warped in that time. I often obſerved in a morning that we ſhould have ſouth wind, even before the leaſt of it was felt; for the ſun is of a very pale colour at that time, and as long as it laſts; as ſoon as it begins to blow, the air

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is full of duſt and ſand. Its effects are not diſagreeable only upon the human body, for I alſo obſerved, that any kind of meat which would keep a week in winter, with northerly winds, will corrupt in a day or two with this, though it may be colder in that time than during the former. Hence we might be led to think, that if it blows during the time when the plague is in the country, it would (ſuppoſing it to be a ſort of putrid fever) encreaſe, or at leaſt feed and maintain that diſtemper. But I have obſerved that the plague, in the year 1771, was much ſtronger, and more laſting than that of 1781; though during the firſt, we had conſtantly a northerly wind, and exceedingly pleaſant weather: and during the latter, we had often ſouth and ſouth-eaſt winds which occaſioned great heat, upon which it always ſlackened in its violence. It has alſo a very bad effect upon all vegetables, becauſe it dries them up to ſuch a degree, that they would periſh if it were to laſt for any conſiderable time: nay, if this wind ſhould prevail in Egypt, this country would ſcarce be inhabitable.

But, though I have ſaid much concerning the bad effects of this wind, I think, however, it has at the ſame time alſo its advantages, and may in ſome reſpect be of great benefit to the country. I have above obſerved, that it ſeldom or never blows before the beginning of November, though I have ſeen inſtances of it in October. Now, as this is the time when the river retires from the fields into its proper channel, theſe fields are all ſoaked with water to the depth of two, three,

three, or more feet, and in ſome places the water is alſo left ſtanding: conſiderable exhalations of courſe ariſe from this great humidity of the ground, to carry off which, no wind can be more proper than the exceſſive dry ſouth and ſouth-eaſt wind; and the ſands which it brings upon the fields are very beneficial for the proper mixture of the mud, which the river has juſt then left, to make it lighter, as I have before obſerved. I made ſeveral experiments with mud, and always found it unfit to produce any vegetables, in the ſtate in which the river leaves it, without ſuch a mixture. It is naturally ſo tough, that it grows as compact and hard as a ſtone, if not conſtantly ſupplied with a great deal of water; and thus we often find that things ſeemingly the moſt diſagreeable have their great advantages, in which we may juſtly admire the wiſdom of our kind and benevolent Creator.

Due eaſt and weſt winds are very rare in Egypt, and both of them are diſagreeable. Strong tempeſts I have never ſeen there, at leaſt not about Grand Cairo and Upper Egypt. At Alexandria, and in general on the ſea coaſt, they occur more frequently, though neither ſo furiouſly, nor of ſo long a duration, as in the high north or ſouth latitudes. It is true there is ſeldom a winter in which ſome damage is not done to the ſhipping in the harbour of Alexandria; and I remember one winter when upwards of thirty ſhips ran on ſhore, and many of them were wrecked in the new harbour of that town: but it cannot ſo much be attributed to the violence of the

tempeſt, as to the bad condition of the cables of thoſe veſſels, and the badneſs of the ground of this harbour, which cuts them if they are not well ſecured and looked after. It was very remarkable, that there were about ſix Engliſh ſhips riding in the ſame harbour that night, none of which ſuffered any harm. The ground of the old harbour, to the weſt of the town, is very good, and accidents of this kind ſcarce ever happen there; but none but the Turkiſh veſſels, and thoſe of their ſubjects, are admitted into it, on account of a ſuperſtitious tradition, that the Chriſtians will one day enter that harbour and take the country; therefore the Europeans are all obliged to go to the new harbour on the eaſt ſide, though far inferior to the other.

The inhabitants of Egypt call the northerly wind *diab*. They have a method of making it play, or pervade, through the whole of their houſes: for this purpoſe they fix a ſort of a half roof on the top of them, above ſome open ſpace, which in ſmall houſes is commonly the court yard, for there is ſcarce any houſe, though ever ſo ſmall, without ſuch a yard. This half roof they always turn to the north, to which it is open, thus: If they cannot well place it due north, then they make up one or ſometimes both the ends, juſt as it ſuits beſt, to catch the wind, by which it is directed down; but the ſouth wind will paſs over it. This may alſo ſerve as a proof, that they have no ſtrong tempeſts to fear, otherwiſe this kind of buildings would be carried away in an inſtant. They have alſo frequently a ſort of ſmall cupola fixed upon the top of ſeparate apartments,

apartments, with an opening on the north ſide, which anſwers the ſame purpoſe.

It cannot abſolutely be ſaid that it does not rain at all in Egypt; but this is however true, that ſeveral years may paſs, where all the rain that falls in the courſe of a whole year, about Grand Cairo, and further up, would collectively not be of one hour's duration. If even it rains a few drops in winter or ſpring, it ſeems always as if ſomething obſtructed its falling, and it laſts but very few minutes. But, though this is generally the caſe, yet it once happened, during my abode, in November 1771, that heavy ſhowers of rain, accompanied with ſome thunder and lightning, followed one another for five ſucceſſive nights, though it did not rain in the day time: and as the houſes are not calculated for this, I could at laſt ſcarcely find a dry ſpot in the whole houſe to ſleep in. Some houſes fell down on that occaſion, and ſeveral lives were loſt; but this was very extraordinary, and can happen only in winter and ſpring. From the end of May to the end of October, no rain is to be expected. During that time there is alſo no lightning of any kind, much leſs a thunder ſtorm: the latter are, upon the whole, not at all frightful in Egypt. In winter it has often all the appearance as if a dreadful thunder ſtorm was coming, but it is never of any conſequence, nor accompanied by any very loud thunder; and I remember but once to have obſerved a flaſh of lightning, which in ſome meaſure reſembled thoſe we have in England. The natives ridicule the idea of lightning ſetting fire

to houſes, and killing men and beaſts, and regard it as a fiction when told that it does ſo in Europe: hail-ſtones are never ſeen, and now and then only I ſaw ſome little ſtones like large ſhot mixed with rain in winter.

During the months from November till the end of ſpring, it rains very frequently, and often very heavy, towards the ſea coaſt; but it ſcarcely ever reaches much above half a degree up the country. In this the wiſe regulations of God are again very viſible; for, as the river cannot overflow thoſe parts of the country ſo near the ſea where it is divided into ſo many channels, the rain in that ſeaſon perfectly ſupplies that defect. Whoever ſees the ground about Alexandria in ſummer, will ſcarcely think it capable of producing a ſingle blade of graſs; and, if he goes no farther into the country, he will form a moſt contemptible idea of its boaſted fertility: but even this ground, which looks ſo very poor in itſelf, will, by means of this rain, bring forth excellent wheat, clover for cattle, and all ſorts of vegetables. But, during the ſummer ſeaſon, it rains as little here as in any other part of Egypt.

From the month of February to the beginning of July the air is exceſſively dry in Egypt; and beſides the few drops of rain that may fall here and there in the firſt of theſe months, there is no fog of any kind to be ſeen: during that time every body may ſleep ſafely in the open air on the tops of the houſes. From the beginning of July

July a little dew is perceptible every morning. This increaſes in proportion with the river, and is very ſtrong when the river is at the higheſt; it alſo continues during the winter, except when there is a ſoutherly wind. At that time there is alſo now and then a foggy day, but very ſeldom. As ſoon as the dew begins to fall in July, then it is no longer ſafe to ſleep in the open air; it is particularly pernicious to the eyes. Though iron ware may be kept many years in Egypt, with very little precaution, without ruſting, except on the ſea coaſt, yet it muſt not be expoſed to this dew, and the windows muſt at leaſt be ſhut in the night where ſuch things are kept.

During the month of June the horizon is commonly every morning covered with very thick clouds till about ten or eleven o'clock, eſpecially when the wind is northerly. By this wind they are driven very faſt to the ſouth, and it is not altogether unlikely that theſe clouds may at laſt contribute to the rain between the tropics. The ſtrong dew, which often falls during the winter ſeaſon, is of great ſervice to the vegetables; and though this rain is not abſolutely required to make a plentiful year, yet the inhabitants like a little of it at that time, particularly for their clover, which is much refreſhed by it. It is in the winter ſeaſon that moſt vegetables are produced; for, in ſummer, nothing will grow in places which are not artificially watered.

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Though the degree of cold is very inconſiderable in winter, meaſured by the thermometer, yet it is very penetrating, particularly with ſoutherly winds. The chief reaſon of its being thus felt may be, that the body is all the ſummer accuſtomed to a continual ſtrong perſpiration, by which it becomes tender. Beſides this, the houſes are much more calculated for rendering the intenſe heat ſupportable, than to prevent the effect of cold. There is no fire-place in any apartment, and to be comfortably warm, every body that can afford it wears a fur in winter: but the ſame degree of heat, which would appear inſupportable in our countries, is by far not ſo diſagreeable in Egypt, becauſe the air is commonly very clear and free from vapours, and at the ſame time much refreſhed by the northerly winds.

In ſpring the ſky is particularly ſerene and clear in the night, and I have no where ſeen the moon and the ſtars ſhine with ſuch luſtre. This muſt have been very advantageous to the ancient aſtronomers, and would be ſo now, if the preſent inhabitants were capable of making a proper uſe of it: but it ſeems that thoſe ancient aſtronomers are at preſent all changed into pretended aſtrologers.

By all theſe obſervations, and the experience of many Europeans who have from time to time reſided in Egypt, it appears to be one of the moſt healthy countries in the univerſe. It is true there is a very great

great number of blind people in this country, and the climate ſeems to be pernicious to the eyes. I alſo obſerved, that putrid and bilious fevers were common in ſpring among ſome claſſes of people, particularly in May and June; but I think that very good reaſons may be given for both. People of a groſs habit, and full of humours, are often troubled with ſore eyes; and indeed the bright and powerful ſun, the exceſſive dry air in ſome parts of the year, the fine ſand and duſt during the ſoutherly winds, cannot but be detrimental to the eye ſight; but we may, however, by a little precaution, keep quite free from ſuch diſorders. Moſt of the blind people are of the lower claſs, and from their manner of living it may be eaſily accounted for. The ſoil of Egypt is every where very much impregnated with ſaline particles of various kinds, ſuch as ſaltpetre, common ſalt, and one kind peculiar to that country, called by the natives, *natron*, which is exceedingly ſharp. The country being ſo very dry, is ſeldom quite free from duſt. The dew that falls during the overflowing of the river is pernicious to the eyes, as mentioned before. Now the lower claſs of people do not uſe the leaſt precaution; they are often ſeen aſleep in the open fields or ſtreets, moſtly naked, in the burning ſun, quite covered with duſt; they do the ſame in the night in the dew. It is therefore but a natural conſequence that they ſhould be afflicted with ſore eyes, and other diſorders; and it is much to be wondered at that they have them not in a greater degree.

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The ſame may be ſaid of the putrid and bilious fevers above-mentioned, with this difference only, that theſe fevers are more the lot of the higher claſs of people, and particularly the better ſort of Chriſtians; for which two good reaſons may be given: firſt, They keep a very rigorous Lent of forty days before Eaſter, during which they allow themſelves nothing elſe but vegetables poorly dreſſed with oil, by which their ſtomachs muſt of courſe be weakened. The moment this time is over, they begin to feaſt, and it is quite ſurpriſing to ſee how they load their weakened ſtomachs with all ſorts of heavy food, ſuch as hard boiled eggs, ſweet heavy cakes, beſides meat in great quantity.

The ſecond reaſon may be as well applied to the Turks as to the better ſort of Chriſtians: they are, during the winter, clothed in furs; nay, ſome of them wear two furs at a time. When it begins to be warm, they not only ſuddenly and imprudently leave them off, but as they commonly have a large hall on the ground floor with an artificial fountain in the middle, they often go and ſit there without any precaution after they are heated. This is ſufficient not to give them ſuch fevers only, but to kill them at once.

If diſtempers are peculiar to any country on account of a corrupt air, or other circumſtances, it will commonly attack foreigners ſooner than the natives who are accuſtomed to it. Now, as this is not the

caſe

caſe here, I always thought that ſuch diſorders ſhould not be attributed to the country, but to the imprudence of its inhabitants. I have always conſidered that part of the year to be very healthy; for, contrary to our countries, it is by far the drieſt ſeaſon of the year. The heat encreaſes very gradually, except thoſe few days when there is a ſoutherly wind; and the different ſenſations in the body, occaſioned by change of weather, which are ſo common in ſpring with us, are not felt there. This is more the caſe there in autumn, when, after a continual ſtrong perſpiration of ſeveral months, nature muſt all at once find other means to diſcharge it.

The ſky is, as has been already obſerved, not always ſo clear in that country, as ſome people would imagine. It is often ſo covered with thick and heavy clouds, that if it had the ſame appearance in our country, we ſhould think it would ſoon rain very violently; but here it is never to be feared, except ſometimes in winter, as before ſaid. All the ſigns which commonly prognoſticate a change of weather in Europe, as a ring around the moon, &c. which are frequent in Egypt, are never followed by any particular alteration, and only ſhew that there muſt be vapours in the air.

I will not take upon me to determine why there ſhould be ſo ſmall a quantity of rain in the upper parts of Egypt, when, in the very ſame latitude, only about ſixty or ſeventy miles more eaſt, in the deſerts of Arabia, it not only rains much in winter, but alſo ſnows,

particularly in the hilly parts about Mount Sinai. The high mountains may certainly contribute greatly towards it; but there are alſo mountains enough in Egypt, ſome of which are far from inconſiderable, which might at leaſt attract ſome humidity. The whole deſert between the Red Sea and the Nile, and the Lybian Deſert, conſiſts of nothing elſe but mountains, between which there is nothing but a narrow inhabitable ſlip of land, with a large river running all the length of it. But the almoſt total want of rain, and the remarkable appearance of an obſtruction to its falling, if even there ſhould now and then be a little of it, remain a myſtery to me.

SOME

SOME REFLECTIONS

UPON

THE RISE OF VAPOURS,

AND

THE FORMATION OF THEM INTO CLOUDS AND RAIN.

VARIOUS theories have been formed concerning the riſe of vapours, their formation into clouds and rain; but none of them has yet given me ſatisfaction, as too much has always been preſuppoſed.

It is very eaſy to ſay they riſe, becauſe they are rarefied, and are merely lighter than the ſpace of air which they occupy. But how do they become lighter? What have we properly to underſtand by their being rarefied? How is this change wrought in the nature of water?

Water is an almoſt incompreſſible body, and by many degrees heavier than the air, and though it may be a little expanded, which

may be ſeen when put into an air pump, where the air is afterwards drawn out, yet this is never to ſuch a degree as to make it equally light with the ſame body of air that might occupy the ſame ſpace, much leſs to make it ſo much lighter, as to enable it to ſwim in the air, as we obſerve the clouds do.

Suppoſing alſo that water might be conſiderably expanded by the heat of fire, which occaſions it to riſe in vapours; can we ſuppoſe that it can riſe conſiderably before it loſes all that effect which the fire may have had upon it, and as the upper regions are always cooler, all that which was expanded by heat, will ſoon be condenſed, and thus become incapable of ſwimming in the air.

A variety of obſervations have, therefore, inclined me to think, that all vapours muſt conſiſt of ſmall imperceptible globules or bubbles, filled either with rarefied or inflammable air, by which they are rendered lighter than the ſpace of air which they occupy, and by which they are enabled to riſe more and more, till they arrive at that height, where ſo much ſpace of air, as they occupy, is of the ſame weight; and till at laſt they become ſo numerous, that they begin to touch and coaleſce with one another, or are driven together by the wind in the upper atmoſphere, by which they burſt, and conſequently fall: if they accidentally fall upon others below them, they will occaſion them to burſt, and uniting with their water, will by degrees form ſuch large drops as we often ſee deſcend in rain.

I would

I would not pretend to maintain, nor can I well believe, that they are all filled with inflammable air, but I think ſome are filled only with rarefied air, according to the nature of the cauſe by which they aſcended, and I think reaſons may be given why both ſuppoſitions may be well grounded.

If we put water upon the fire in an open veſſel, we ſhall ſoon perceive bubbles to riſe from the bottom, which cannot be filled with any thing but the air which is contained in the water, and is now rarefied by the heat of the fire. Theſe bubbles commonly burſt as ſoon as they come to the ſurface, becauſe they are too large to maintain the air within them, ſo as to occaſion them to aſcend: when the water begins to grow warmer, they increaſe more and more, and an imperceptible ſteam will riſe, which I ſuppoſe to be nothing but ſuch diminutive bubbles, filled with rarefied air, and conſequently more capable to maintain themſelves than the larger ones, by which they are enabled to ſwim in the air ſo high as the equilibrium will admit. I am, therefore, inclined to think, that all thoſe vapours which riſe out of clean water by heat, are filled with rarefied air, and all thoſe which riſe from marſhy grounds, and ſtanding pools, are probably filled with inflammable air. And who knows if this kind of air is not contained in almoſt all parts of the earth? In ſome places it is too viſible, as in coal-pits, and wherever there is the leaſt inteſtine motion. We are not yet ſufficiently informed of all places and ways in which it is produced.

As

As we ſee that inflammable air is produced wherever there is any inteſtine motion, can we then ſuppoſe that the ſea, which certainly muſt furniſh the greateſt part of all vapours, is void of it. For nobody will deny that the innumerable dead fiſhes, their evacuations when alive, with other animals, and various other ſtrange ſubſtances, carried into it by rivers, muſt cauſe a great deal of inteſtine motion.

If a moiſt body, as an apple, which contains at the ſame time a good deal of air, be placed under the air pump, and the air drawn out of it, there will always appear little bubbles filled with air. Now, as this is ſo viſibly the caſe in this inſtance, why ſhould not the inflammable air confined in the earth, particularly in ſwamps, and marſhy grounds, as alſo common air rarefied by heat, act in the very ſame manner? For it is always inclined to riſe, by its being ſo much lighter than the common air.

Thus we ſee when vapours riſe from the earth in a hot ſummer day, they often form thunder ſhowers. This I have nowhere obſerved more to my ſatisfaction than in North-America. It often happens that there is a great thick fog in a morning in ſummer: as ſure as this fog riſes and forms itſelf into clouds, it is not many hours before a thunder ſtorm ſucceeds. I have often obſerved, that meanwhile the clouds all keep moving from weſt to eaſt, which is the direction almoſt all thunder ſhowers take in that country. By this I gueſſed that theſe clouds which formed the ſhower, could

could not come from any ſea, as they could not have croſſed ſo large a continent in ſo ſhort a time. This made me think, that at leaſt moſt of theſe vapours which formed thoſe clouds, roſe from the earth. During ſuch a thunder ſhower it ſeems to be evident, that moſt of thoſe bubbles are filled with inflammable air, though I will not ſay all of them. We always find that the rain pours down moſt abundantly after a ſtrong flaſh of lightning.

After the many experiments made with inflammable air, I reaſoned in the following manner: Suppoſing the above notion true, that the thunder clouds are formed by ſmall bubbles, ſome filled with rarefied, ſome with inflammable air, when they become ſo numerous as to touch and coaleſce with one another, or are driven together by the wind in the upper atmoſphere; (for ſuch a wind is always obſerved at that time, and is even often quite contrary to that in the lower atmoſphere) then if many of them burſt at once, they conſequently occaſion a great fall of rain, and if they have been filled with inflammable air, that air muſt eſcape in great quantity, which is very liable to be ſet on fire by the electric matter which abounds ſo much in the atmoſphere, and particularly in thunder clouds. Now, by the burſting of ſo many bubbles, it muſt follow, that the rain increaſes, and by the inflamed air mixed with, and ſet on fire by the electric matter, it is no wonder that the lightning is ſtrengthened, and the flaſhes become ſo very vivid. The commotion or concuſſion of the air occaſioned by one flaſh, may occaſion many bubbles more

more to burſt, and if theſe happen to be alſo filled with ſuch air, then this air is as liable to catch fire as the firſt, and thus it frequently happens that one great flaſh is immediately followed by another. It is well known that marſhy grounds, and ſtanding pools, abound with inflammable air, which is moſt liable to riſe in vapours in ſummer, or whenever it is warm; but ſome might aſk, How can the common air be rarefied, or inflammable air be procured in winter; for we now and then ſee alſo lightning in that ſeaſon? This might be anſwered by another queſtion, viz. How can we know where, and at what diſtance from us, thoſe vapours that form the clouds over our heads in winter, roſe into the atmoſphere? Certainly none will riſe in a froſty day, or out of ſwamps and pools which are frozen up. But we ſhall alſo ſeldom ſee any lightning in winter, except there has been ſome mild weather before it, and beſides this the ſea can always furniſh a ſufficiency.

Since I wrote the above obſervations, I have been more confirmed in my ideas by the experiments of Mr. Lavoiſier (See Monthly Review), by which he proves, in his Elementary Treatiſe on Chemiſtry, that common water conſiſts of eighty-five parts of oxygen, and fifteen parts of inflammable gas. If this be the caſe with common ſpring water, it muſt be much more ſo with ſwamps and pools, or any water which is not perfectly pure. The riſe of vapours in Egypt, which always begins to be viſible after the 17th of June, which is the time the firſt rains fall in Abyſſinia, furniſhed me with a large field

field for ſpeculation, and the obſervations I then made, always ſeemed to favour the above-mentioned theory, though it was at that time not ſo clear to me as it is now, after ſo many new experiments have been made with inflammable gas. As the increaſe of the Nile is often very viſible, particularly when it is come to ſuch a height as to exceed the banks, I have always obſerved, that as ſoon as it begins to cover any ground which is dry, it always cauſes an inteſtine motion, which leaves a ſcum upon the water, and occaſions a ſtrong ſmell, which is a ſure proof that vapours are carried into the air, that a good deal of inflammable gas muſt be procured by theſe means, and that theſe vapours muſt contain a great quantity of it, appears very probable to me: for I remember that I one day took an airing in a ſmall boat upon the river Nile, with a fine north wind, at the time when it was faſt increaſing; I ſtopped at a ſmall iſland covered with reeds, which the Nile had juſt begun to cover; I ſtept out of my boat upon the iſland, but a nauſeous ſmell, occaſioned by the water juſt reaching the rotten leaves fallen from the reeds, ſoon obliged me to return to my boat, which I had ſcarcely reached, when a ſtupor overtook me, which made me lie down and ſleep very ſound till I came home. I immediately conjectured that I muſt have ſwallowed a great quantity of air unfit for breathing. I felt myſelf very feveriſh for two days after, till nature took a turn and carried it off by a violent diarrhœa, which, though it brought me exceedingly low, cured me. Now as this is a fact which has been before mentioned, that there are no vapours to be obſerved until the middle of June, it does

not ſeem to me improbable that the firſt rains in Abyſſinia, upon a parched ſoil, muſt cauſe an inteſtine motion, which may produce vapours in the manner above deſcribed, and at the ſame time leave the water which it carries into the Nile and to Egypt, much more impregnated with inflammable gas than before, which may occaſion the firſt appearance of dew after it reaches that country; for it has before been obſerved, that the more the river encreaſes, the ſtronger this dew will grow every morning, until it is like a miſty rain when the country is quite overflown.

Yet I by no means wiſh to eſtabliſh a theory in oppoſition to others, formed by men of far ſuperior talents and experience, but have merely noted this down as crude ideas which might, perhaps, be ſuſceptible of a better inveſtigation, and the hint may, probably, not be unwelcome to ſome more enlightened and more acute philoſopher, if even ſome parts of it only ſhould be well grounded.

A SPECIMEN

A SPECIMEN OF

TURKISH JUSTICE,

OR, RATHER,

OF THAT OF THE MAMELUCKS IN EGYPT.

DURING my reſidence at Grand Cairo, I lived in rather a cloſe and confined part of the city, not far from the canal which paſſes through the whole length of it, and which, from the middle of October to the June following, is very offenſive, owing to a number of drains from privies which go into it, and the filth thrown in from the adjacent houſes. And as my occupation there was chiefly of a ſedentary nature, I ſoon found that frequent exerciſe in the open air was eſſentially neceſſary for the preſervation of my health; for this purpoſe I often went into the fields in the neighbourhood of the city: but the heat of the climate being very enervating, I perceived, that when I had no object to exerciſe my activity upon, I was always inclined to ſit down under the ſhade of a tree, by which my aim was fruſtrated. In order to remedy this, I ſometimes took a fowling-piece with me, particularly in the winter and ſpring ſeaſons, when there was commonly plenty of game, ſuch as ſnipes,

wild-ducks, and geeſe, curlieus, quails, &c. but eſpecially water-fowl, which the inhabitants of every denomination are at liberty to ſhoot for their diverſion, the Turks themſelves being much too indolent to fatigue themſelves with ſhooting. As the Beys, and other men in power, have commonly a numerous train with them when they go out of town, they may on that account, and from the flatneſs of the country, be perceived at a conſiderable diſtance. Whenever, therefore, I obſerved any of them, I generally avoided coming too near them, knowing how ready they are to find ſome pretext or other for extorting money, from Europeans eſpecially, whom they always ſuſpect of being rich. In this way I had avoided falling into their ſnare for above nine years, when at laſt it happened on the 15th of November, 1779, that being out on the above-mentioned diverſion, in company with the Secretary to the Venetian Conſul, we were juſt amuſing ourſelves with ſhooting ſnipes on the road ſide while returning home: it wanted a full half-hour to ſun-ſet when we came near the city gate. Here we were obſerved by ſome Mamelucks belonging to one Oſman Bey, who, with his train, had been near us, though hid from our ſight by ſome hills compoſed of rubbiſh, of which there are many lying all round Cairo, ſome of them ſo high as to overlook almoſt the whole city.* Two of theſe Mamelucks came on

* There is a certain ſum of money allowed by the Sultan for carrying this rubbiſh, ariſing from old houſes that have been pulled down, to the ſea; but the Beys find it more for their intereſt to put the money into their own coffers, and to carry the rubbiſh no farther than is abſolutely neceſſary.

full

full gallop toward us, with drawn ſwords in their hands, and followed by ſome footmen. They immediately ſtripped us of our fur-coats, ſhawls, and whatever elſe of any value we had about us, demanding one hundred *machbul* or Turkiſh *ſchechines*, each in value about ſeven ſhillings and ſix-pence, threatening to bring us before their maſter, unleſs we gave them the money immediately, and then we ſhould ſee what would become of us. I told them we had no ſuch ſum about us, and taking out my purſe, offered it them. They at firſt received it, but finding that it contained only about twenty-five ſhillings in ſmall ſilver pieces, they threw it back with diſdain, crying, *dahkab*, i. e. *gold*. Knowing that I muſt expect nothing but ill treatment, I told them that I had no gold with me, but if they would come with me to my houſe I would give them ſome. At this they only curſed and ſwore, not being at liberty to leave their maſter. Meanwhile ten more of theſe diſagreeable gueſts joined them on horſeback, and repeated the ſame demand of gold, enforced with the ſame threat of being brought before the Bey if I refuſed to comply with it. I again anſwered as before, that I had none about me, but that I would give them ſome if they would go with me to my houſe. At laſt the leading man among them ſaid to me, (for the poor Venetian could not ſpeak one word of Arabic) go you home and fetch your gold; but we will keep your companion here, and if you do not ſoon return we ſhall cut off his head. When I ſaw the poor man crying, and trembling all over, I could not think of leaving him in the hands of theſe tigers, and eſcaping myſelf: I therefore told

told him he might go and fetch the money, and I would ſtay with them. He had ſcarce advanced a few ſteps, when the ſervants fell upon him, and ſtripped him of the few remains of cloathing he had left, ſo that he was obliged to go naked into the town. By this time the ſun had ſet, and it began to grow duſk; and as the Mamelucks durſt not ſtay away from their maſter till my companion ſhould return, one of them rode up to the Bey, and told him they had ſeized an European, from whom ſomething might be got. He ſoon returned with an order that I ſhould be brought before the Bey; ſo taking me between their horſes, they dragged me to the place where he was ſitting, with his train about him. When I came near him, I addreſſed him with the words "I am under your protection;" which phraſe, if they are not maliciouſly inclined, they anſwer with "You are welcome." But inſtead of anſwering at all, he ſtared furiouſly at me, and then ſaid "Who are you?" I anſwered, an Engliſhman. Q. What are you doing here in the night? You muſt be a thief! Yes, yes, probably the one who did ſuch and ſuch a thing the other day. To this I replied: I was entering the town-gate, half an hour before ſun-ſet, when I was taken by your Mamelucks and detained till now, when indeed it is dark, but ſtill not an hour after ſun-ſet, the time for ſhutting the gates. Without ſaying any thing farther, he pointed to one of his officers, and ordered him to take me to the caſtle, a building at ſome diſtance out of town, at a place where moſt of the Beys have houſes. It is an extenſive ſandy plain, where they exerciſe their Mamelucks.

Every

Every month one of the Beys in rotation takes his ſtation here, in order to guard the town againſt the wandering Arabs in the night. This time it was the turn of the above-mentioned Oſman Bey, to ſerve this office. Having given the order for my removal, I wanted to ſay a few words more, but was prevented by a horde of ſervants, who are always glad to inſult an European. One gave me a kick on this ſide, and another on that; one ſpat in my face, while another put about my neck a rope made of the filaments of the date tree, which is much rougher than one made of horſe hair. A fellow in rags was ordered to drag me along, and another on horſeback, armed with ſwords and piſtols to guard me. As we proceeded towards the place, there was a gentle ſlope, with a large garden, ſurrounded with a mud wall on the left. As the gardens here conſiſt moſtly of irregular plantations of orange, lemon, and other prickly trees, through which no horſes can paſs, it occurred to me that I might cut the rope by which I was held, and make my eſcape over the wall, the place being well known to me; but when I looked for my knife, I found it was gone. Soon after the fellow who dragged me ſaid to me, give the guard money and he will let you go. The word *money* operated like an electrical ſhock. The guard came galloping up to me, and aſked me whether I had any money left; I told him I would give him what I had if he would let me go. Accordingly I gave him the purſe, which the Mamelucks had refuſed. Having looked at it, he put it into his pocket without ſaying a word, dragging me on till we came to the place. Here I was put into a

room

room half under ground; a large iron chain, with links like a waggon chain, was faſtened to my neck with a padlock, and the other end wrapped round a piece of timber. I was much heated with walking, and very thirſty, yet the ſervants, hoping to be rewarded, freely furniſhed me with water. But no offers could prevail upon them either to let me have pen and ink, or to take a letter for me to my friends in town, to inform them of my ſituation; nor indeed could they have gratified me without danger to themſelves. Juſt then being cold, and ſtripped of my clothes, I was more afraid of taking cold than of any thing elſe. In about half an hour the Bey arrived with all his men, and lighted flambeaus before him; he alighted, went up ſtairs into a room, ſat down in a corner, and all his people placed themſelves in a circle round him. This done, I was ſent for, my chain was taken off, and I led up by two fellows. On the way up, I heard the inſtrument uſed for the baſtinado rattle, and knew from that what I had to expect. Upon entering, I found a ſmall neat Perſian carpet ſpread for me, which was in fact a piece of civility, for the common people, when about to receive the baſtinado, are thrown on the ground. The Bey again aſked me, who I was? *Anſw.* An Engliſhman. Q. What is your buſineſs? *Anſw.* I live by what God ſends (an uſual Arabian phraſe). He then ſaid, throw him down: when I aſked what I had done. How, you dog, anſwered he, dare you aſk what you have done? Throw him down. The ſervant then threw me upon my belly, the uſual poſition upon ſuch occaſions, that when the legs are raiſed up, the ſoles of the feet

may

may be horizontal. They then brought a ſtrong ſtaff about ſix feet long, with a piece of an iron chain fixed to it with both ends: this chain they throw round both feet above the ancles, and then twiſt them together, and two fellows on each ſide, provided with what they call a corbage, hold up the ſoles of the feet by means of the ſtick, and ſo wait for their maſter's orders. When they had placed me in this poſition, an officer came and whiſpered into my ear, do not ſuffer yourſelf to be beaten, give him a thouſand dollars and he will let you go. I reflected, that ſhould I now offer any thing, he would probably ſend one of his men with me to receive it; that then I ſhould be obliged to open my ſtrong cheſt, in which I kept not only my own, but a great deal of money belonging to others, which I had in truſt, having received it in payment for goods ſold for other merchants. The whole of this would in all probability have been taken away at the ſame time; and as I could not think of involving others in my misfortunes, I ſaid, *maſiſh!* that is, *no money!* upon which he immediately ordered them to begin, which they did, at firſt however moderately. But I at once gave myſelf up for loſt, well knowing that my life only depended upon the caprice of a brute in human ſhape; and having heard and ſeen ſo many examples of unrelenting cruelty, I could not expect to fare better than others had done before me. I had, therefore, nothing left but to caſt myſelf upon the mercy of God, commending my ſoul to him; and indeed I muſt in gratitude confeſs, that I experienced his ſupport moſt powerfully; ſo that all fear of death was taken from me, and if I could have

bought my life for one half-penny, I ſhould, I believe, have heſitated to accept the offer. After they had continued beating me for ſome time, the officer thinking, probably, I might by this time have become more tractable, again whiſpered into my ear the word *money*; but now the ſum was doubled. I preſently anſwered *maſiſh!* They then laid on more roughly, and every ſtroke felt like the application of a red-hot poker. At laſt the ſame officer, thinking that though I had no money, I might have ſome fine goods, whiſpered again ſomething to that effect. As I knew that elegant Engliſh fire-arms will often take their fancy, even more than money, and happened to have a neat blunderbuſs, richly mounted in ſilver, value about 20l., I offered him that, as I could have got at it without opening my ſtrong cheſt. When the Bey obſerved me talking with the officer, he aſked him what I had ſaid; the officer lifting up his finger, anſwered with a ſneer, Bir Corabina! that is, one blunderbuſs. Upon which the Bey ſaid, Ettrup il kelp! that is, beat the dog. Now they began to lay on with all their might. At firſt the pain was excruciating, but after ſome time my feeling grew numb, and it was like beating a bag of wool: when at laſt he ſaw that no money was offered, he began to think that I might be poor; and as I had, however, done nothing to deſerve puniſhment, he at laſt ſaid, Saibu! that is, let him go. Upon which they looſened my feet; I was obliged to walk down again into my priſon, and the chain was again put about my neck. Upon my aſking the ſervants why I muſt be chained, ſince in the preſent condition of my feet, there was little danger

danger of my running away; they ſaid, the Bey will have it ſo: and I was obliged to ſubmit. In about half an hour a meſſenger came with orders to bring me up again; the ſervants then took off the chain, and carried me till I was near the door, when they bid me walk, or elſe the Bey would beat me again. At firſt I was apprehenſive, leſt this might prove true, thinking ſome one might have told him, that with a little more beating, money might ſtill be had. This has really ſometimes happened; and there are inſtances of the baſtinado having been repeated for three days ſucceſſively, to the number of two thouſand ſtrokes, after which the feet are generally left uſeleſs for life. Such ſevere beating may be borne by a very ſtrong conſtitution, but in thoſe who do not enjoy that bleſſing, it often happens, that before they have received ſix hundred ſtrokes, the blood guſhes from their mouth and noſe, and they die either under or ſoon after the operation. When I came within the door, I ſoon perceived that it was a mere farce contrived to get rid of me. The Bey aſked one of his officers, "Is this the man you told me of?" He then drew near, and ſtared in my face, as if narrowly inſpecting me; then lifting up his hands, he cried out, By God it *is!* Why, this is the beſt man in all Cairo, and my particular friend; though by the way I had never ſeen his face before. He went on: "I am exceeding ſorry I was not here, I ſhould elſe have told you," with many other ſuch like expreſſions: upon which the Bey ſaid, there take him, I give him to you, and if he has loſt any thing, ſee to get it him again. Once more I was obliged to walk till out of his

ſight, when the ſervants of my new friend took me up, and carried me a great way to his lodgings, where he offered me ſomething to eat; but it may be gueſſed in what ſtate my appetite was. He then made me a tolerable bed, which was the more acceptable, as it ſecured me from taking cold, having been ſtripped of the greater part of my clothes, of which I got back nothing but an old Caſhimere ſhawl. I could not help aſking him whether it was in this way that ſtrangers were honoured by his countrymen? But I got for anſwer, Min Allah, Maktub, Mukkader! that is, it is from God: it is ſo written in the book of fate, which cannot be altered. I gave him to underſtand, that I rather ſuſpected it was from the devil. This liberty of mine he did not take amiſs. He then anointed my feet, and tied ſome rags about them; and ſo I paſſed a very uncomfortable night. In the morning he aſked me whether I knew the Maſter of the Cuſtoms: I anſwered, yes; he is my very good friend. Well, ſaid he, I will bring you to him; then ſetting me upon an aſs, he himſelf mounted a horſe, and, accompanied by one of his fellow-ſoldiers, conducted me towards the city. When we came near the gate he ſaid, take away thoſe rags, it is a ſhame to ride in ſuch a trim into the town. How a ſhame? ſaid I, certainly not for me, but for him who did it. He again ſaid, Mukkader! When we arrived at the houſe of the Maſter of the Cuſtoms, he ſeemed much ſtruck, and wiſhed to know how the affair had happened. I only begged him to ſettle for me with my new friend; for I well knew that the whole farce was meant to play a little money into the hands of this officer,

officer, as the Bey could get no ſum worth his own acceptance from me. This office the Maſter of the Cuſtoms willingly undertook, and when I ſummed up all, I found it had coſt me about 20l. in preſents to the ſervants, and my *ſoi-diſant* deliverer. They then conducted me to my houſe, where his ſervant carried me up ſtairs, and put me to bed, where I was confined for about ſix weeks, before I could walk with crutches; and for full three years my feet and ancles were very much ſwelled, the latter having been ſeverely hurt by the twiſting chain, ſo that even now, after twenty years, they are apt to ſwell upon ſtrong exertion.

I have ſometimes been aſked, whether it were not poſſible to have ſuch a villain chaſtiſed by the hand of juſtice? Whoever knows any thing of the Beys and Mamelucks, will readily conclude, that it cannot be done, and that it would even be dangerous to attempt it. At that time Ibrahim and Murat Bey were the moſt powerful among the Beys. Had I complained to them, and accompanied my complaint with a preſent of from twenty to fifty thouſand dollars, (for a ſmaller ſum would not have anſwered) they might perhaps have gone ſo far as to have baniſhed Oſman Bey from Cairo; but they would, probably, in a few months have recalled him, eſpecially had they found it neceſſary to ſtrengthen their party againſt others: had this Bey afterwards met me in the ſtreet my head might not have been ſafe. Both Ibrahim and Murat Bey knew ſomething of me; but when they heard the whole affair, they only

ſaid

ſaid of Oſman Bey, God blacken his face. Many real friends whom I had among the Mamelucks and Turks, viſited me during my confinement, and were very compaſſionate: but their chief comfort always was, *Mukkader! min Allah*, &c.

As a proof of the truth of my repreſentation, I may relate the following which happened ſoon afterwards, and in which the very ſame Oſman Bey and Ibrahim Bey were concerned. The former had impriſoned two Arabs for ſome ſlight offence: their wives applied to Ibrahim Bey, as the ſuperior, in behalf of their huſbands, that they might be ſet at liberty. Upon which he ſent a meſſenger to Oſman Bey, aſking of him as a favour to let him have theſe two Arabs, as they were his; which latter is a common expreſſion when they mean to protect any one. Oſman Bey bid the meſſenger return, telling him the men ſhould ſoon follow. The Beys were then both out of town at their houſes, on the above-mentioned ſandy plain. When the meſſenger was gone, Oſman Bey ſent for the two men from priſon, and immediately cut off both their heads with his own hand, and then ordered his ſervants to tie ropes to their legs and drag them to the houſe of Ibrahim Bey. When the latter, who happened juſt to be drinking coffee, perceived what was coming, he immediately threw his cup to the ground, and ordered all his Mamelucks to arm and mount in order to fight Oſman. In an inſtant all was buſtle and uproar, and every body expected that a battle would enſue, when the wives of both Beys interfered, and for

for their ſake peace was made, and no farther notice taken of the whole affair.

But though there are ſuch villains among the Beys and Mamelucks, and one may even ſafely ſay that the major part is of that deſcription; yet, during my long ſtay among them, I found ſeveral, both Mamelucks and Turks, of ſtrictly honeſt principles, and of benevolent diſpoſitions, who were not only good-natured, but faithful o their conviction in regard to right and wrong. Some of theſe became my ſincere friends; but I have almoſt invariably obſerved, that thoſe who came to me with the moſt friendly faces, had commonly ſome deſign to cheat or to make ſome advantage of me.* Thoſe, on the other hand, who looked ſtern and ſuſpicious at the firſt interview, when they found I was not that deſigning villain which prejudice had taught them to think me, very often became my beſt friends, and ſome of them I would have entruſted with any thing of value without the leaſt fear of being impoſed upon.

Upon the whole, I am not ſo blinded by the ill-treatment I have received from ſome of them as to condemn them indiſcriminately. I am fully perſuaded, that many of them would naturally be bene-

* I recollect but one ſolitary inſtance in which I found myſelf miſtaken, in regard to a man who addreſſed me, for the firſt time, with what I thought an over-friendly countenance.

volent

volent and well-diſpoſed, if ſuperſtition in ſome, and prejudice chiefly ariſing from thence in others, did not give them a different bias.

It is impoſſible to give any general character of the Turks; ſince what we Europeans comprehend under that denomination is a mixture of many different nations. There is a difference between a Boſniac, an Albanian, a Dalmatian, a Romelian, a Candiot, an Anatolian, a Tartar, a Curd, and between many other diviſions and ſubdiviſions. Some of theſe ſeem naturally inclined to wickedneſs, being very iraſcible; others, and I may ſay the greateſt part of thoſe with whom I became acquainted, are ſlow and not eaſily irritated; and when they are, it is eaſy to calm and pacify them by fair words and gentle means. They ſmile at an European when they ſee him fly into a paſſion at every trifle. Their religion makes them look upon us as many degrees below them; and as the few Europeans who live among them do not always ſet them ſuch examples as to inſpire them with better ideas of Chriſtianity, ſuperſtition, with want of education and of better knowledge, makes moſt of them believe that there is no harm, and ſome may even go ſo far as to think there is a merit in treating a *Gaur* or *Caffer*, i. e. Unbeliever, ill, though in the Koran it is forbidden. In this particular they are no way different from ſome denominations of Chriſtians, who, in former times, ſtill more than at preſent, treated ſuch as did not think exactly like themſelves, not only no better, but really worſe than the Turks

treat

treat us, and that often for the ſake of principles, which, had the matter been candidly inveſtigated, the perſecutors as little believed as thoſe whom they perſecuted. Every body knows to what extent ſuch perſecutions have been carried, in ſpite of the injunctions of Scripture, not only to love each other, and to bear with the weakneſſes of our friends, but even to love and ſerve our enemies. And though I have found free-thinkers among the native Mahometans, as well as diſguiſed Chriſtians among the Mamelucks, ſuch I mean as wore the maſk of Mahometaniſm from neceſſity, but remained ſecretly attached to their former tenets, being born of Chriſtian parents; yet, if we take them altogether, theſe two deſcriptions are very ſcarce, in compariſon of thoſe among us who believe little or nothing of what they profeſs, the major part being really ſtrict Mahometans. They are taught from their infancy to deſpiſe thoſe whom they conſider as Caffers, or Unbelievers: and as their education is not favourable to the cultivation of their minds, we have no reaſon to wonder when we ſee all kinds of wickedneſs practiſed among them without reſtraint. The difference between them and us, in this particular, is indeed not ſo great in reality as it is in appearance. Were all the clokes and maſks, with which our education has taught us to cover our natural inclinations, at once removed, I am afraid that all thoſe among us who have not found better means to ſubdue their innate evil propenſities than the dictates of their own fancy and reaſon, would make but a poor appearance, as bad, if not worſe, than the Turks: yet I am thankful for the reſtraints laid upon men's cha-

racters among us both by education and law; theſe are certainly a national benefit, though of no ultimate advantage to the individual.

Let us, therefore, not condemn, but have compaſſion with the Turks. Their whole government, their manners, their laws, or rather the execution of them,* are corrupt in the higheſt degree. In all theſe particulars there is indeed ſufficient room for reformation; but it is greatly to be wiſhed, that ſhould what they now poſſeſs be taken from them, they may receive ſomething intrinſically better in place of it, and this I am afraid is not likely to be the caſe, ſhould ſome late pretended reformers be permitted to new-model their government.

THERE are two methods of giving the baſtinado among the Mamelucks in Egypt, which I will endeavour to deſcribe; both are grating to tender feelings: but ladies need not to be too much frightened at the narrative, as their ſex is totally exempted from ſuch treatment, as well amongſt the Turks as Mamelucks.

* I might eaſily, from my own experience, give ſome ſpecimens of law-ſuits, which would prove, that not the laws themſelves, but the execution of them, is chiefly in fault; and that it is in this reſpect that the difference appears moſt ſtriking between their government and that which prevails in our own country.

The

The one is given upon the ſoles of the feet, with the ſo called corbage, which inſtrument I have deſcribed in my diſſertation on the Nile, page 121. Each of the men, who has hold of the ſtick with the chain, by means of which the feet are held up, ſo as to be horizontal, has one of them, with it they beat alternately, like two threſhers, at the command of their maſters. The operation is called receiving, ſometimes eating the corbage.

The other method is, to beat a man acroſs his back, chiefly the ſmall part of it, except when they are mercifully inclined; in that caſe they lay on a little lower. This is done with a ſtick about ſix feet long, and about an inch or three-fourths of an inch thick; the man is thrown flat upon his belly, and held down by his arms and legs by ſervants. As thoſe who are ordered to do it uſually uſe all their ſtrength, no man can eaſily bear more than between thirty and forty ſtrokes: it too often hurts the ſpine. More ſtrokes than the above are likewiſe ſeldom given, except they mean to beat a man to death, which ſometimes is the caſe. This operation is called receiving, or vulgarly, eating the nabute, which ſignifies a ſtick. Bad as it is, it is looked upon as the genteel baſtinado; and any man in a ſuperior ſtation would think himſelf highly inſulted by receiving the corbage, but from the nabute, no Officers, Caſhefs, or Governors of diſtricts, and in ſome caſes not even Beys are exempted. No one thinks himſelf diſhonoured by it, nor does this or the corbage leave any ſtain upon a perſon's character; they talk freely, yea even ſometimes boaſt of it

in converſation. During my abode in Cairo, the ſecond Police Maſter, a man of conſiderable conſequence, received it by the order of Ali Bey, for inſulting a Venetian merchant, whom the latter eſteemed; and ſome time afterwards, Murat Bey ordered it to one of his Caſhefs, who not ſix weeks after that, was made Bey by the former's own recommendation. This new created Bey was for ever after, for diſtinction ſake, from others of the name of Oſman, which they pronounce rather Oſwan, called Oſman Bey Abu Nabute, i. e. Father of the Stick; and he commonly ſigned his name ſo himſelf. However, though it be properly the genteel baſtinado, it ſometimes happens, when the corbage is not at hand, which is ſeldom the caſe, that a peaſant, or one of the rabble is honoured with it. I once accidentally was preſent at ſuch a ſcene, and as it may ſerve as a ſpecimen how the Mamelucks treat the common people, whom they regard no more than as many dogs, I will here relate the ſtory. There was a market day, chiefly for butter and other proviſions, at a village acroſs the river oppoſite to Boulac, the harbour of Cairo, called Embawbe. On ſuch an occaſion there is commonly a great crowd of people who wiſh to be ferried over and back again, which is an inducement for boatmen to come from a conſiderable diſtance, in order to earn a few paras (a bad ſilver coin worth about three farthings a piece). It ſo happened, that a Mameluck wanted to go to a village belonging to him, or rather to the houſe to which he belonged, which village was a good diſtance down the river; when he came to the ſide of it where the boats lay, he eſpied a

boatman

boatman from that very place, and immediately ordered him to take him there. The poor fellow, who thereby loſt all his proſpect of earning ſomething for that day, made ſome excuſe, and was not at firſt willing to obey his orders. The Mameluck inſtantly ordered him to be thrown down and beaten, which was as quickly executed, cloſe before my eyes, with the above deſcribed nabute; when they had given him the uſual number of ſtrokes, he ſeemed unable to ſtir, but they likewiſe did not let him, for they afterwards tied him up all in a lump with ropes, his knees to his breaſt, and the feet where they naturally fall in that poſture, ſo they rolled him into his own boat, placed him next to the poop, and immediately went off, down the river; what became afterwards of the poor man I know not, but I am afraid it did not end there. My whole frame was ſhook, and revolted at ſuch flagrant injuſtice and brutal cruelty; and I could not enough wonder, that there were men ſo debaſed, as to bear it from one day to the other, and ſtill to think themſelves happier than all the world beſides, particularly than the Europeans; for I have often heard them ſay, when they were quarrelling together, "Are we in Malta, that we are treated thus?" But Mahomedaniſm teaches them to believe all comes from God; it is ſo decreed, and it cannot be altered. According to preſent appearances, it will be a long time before other principles can be inſtilled into them, except there ſhould once be a man amongſt them poſſeſſed with the neceſſary power and influence; with a more elevated genius and ſenſe, ſuch as Peter the Great was amongſt the Ruſſians, to make a thorough reformation;

and

and ſtill he would have to ſtruggle with more difficulties, on account of the difference of the Mahomedan and Greek eſtabliſhment. Otherwiſe it muſt be brought about by ſubjecting them to ſome more civilized nation, that by their examples, at leaſt, the riſing generation may imbibe a new ſet of ideas.*

* The French, when they invaded Egypt, might have been inſtrumental to infuſe better ideas into the people, had they not begun their career at Alexandria with worſe cruelties, by murdering the poor inhabitants after they entered the town. Whatever they might afterwards advance or publiſh in their manifeſtoes and proclamations, will never perſuade the already very ſuſpicious Turks and Arabs of their ſincerity, and they are not ſo ſtupid as not to ſee through their artful inſinuations. They told us much of taking the fortreſs of Alexandria by ſtorm, and how Roſetta opened its gates; and of other fortreſſes in the deſerts, ſuch as El Ariſh, Salchiah, &c. But be it known, that all the fortreſs of Alexandria conſiſted of part of the ruined walls of old Alexandria on the land ſide, in much worſe condition than any garden wall in England. Roſetta is an open place, without a ſhadow of a gate; and El Ariſh and Salchiah are mere caravanſeras, i. e. a ſquare, badly walled in, with either ſtones or a mud wall, much inferior to any of our garden walls. Cairo has a wall, but bad likewiſe; and here and there the back of the houſes conſtitute it. Aboukir Caſtle is a ſquare building, more reſembling a houſe, and no place of any ſtrength whatſoever; nor any of the other places except what the French made them afterwards. The caſtle at Cairo reſembles more a fortreſs, and a number of cannons, badly mounted, are kept there; but it is entirely commanded by a much higher hill cloſe behind it

OBSERVATIONS

ON THE

SITUATION OF EGYPT

RELATIVE TO COMMERCIAL ADVANTAGES.

I DO not intend to repeat what the commerce of Egypt has been in former times: this is ſufficiently known, for a great number of volumes have been written about it. I will only mention a few thoughts what it might be at preſent, if it was in the hands of a powerful and civilized nation. A ſlight glance upon the map will immediately make it appear that the ſituation of Cairo is ſuch, as to make it capable of being the center of commerce between the moſt populous countries of the globe. Since, by the Red Sea, it would be connected by a very ſhort cut with India, Arabia, and Abyſſinia; by the Mediterranean with all the ſouth of Europe, and great part of Turkey; and through the Streight of Gibraltar with the reſt, and even with America; by the Black Sea with the remainder of the Turkiſh dominions and Ruſſia: this navigation might alſo be extended by means of the rivers which fall into the Black Sea in the very heart of Ruſſia, Germany, Poland, &c.

It

It has often been doubted if the Red Sea was a ſafe navigation; however I can, from very good authority, declare it to be ſo: for, being at Cairo during the years 1776, 1777, &c. at which time a number of Engliſh veſſels, ſome in the mercantile line, and others with diſpatches for Government, or the Eaſt India Company, came to Suez, the Captains of ſome of them took particular care to explore the navigable part of it. They all aſſured me, that there was plenty of deep water and ſea room during its whole extent; and though there might be ſhoals near the ſhore, and between the iſlands where the country veſſels commonly navigate, the middle was as good a navigation as any they had been in. Some of them have ſhewn me maps, marked with the ſoundings, which they made according to their obſervations. The time for ſhips to come and to go to India is, however, regulated by the monſoons. The ſeaſon when I ſaid before that ſoutherly winds are moſt common in Egypt, is likewiſe the time to come to Suez; and when the northerly winds ſet in, it is time to depart for India. I remember a ſhip of war, commanded by a Captain Connor, which waited at Suez for diſpatches from England, and immediately upon receiving them, ſet ſail from the above-mentioned place for Bengal, where he arrived in twenty-one days. The paſſage to Bombay may be made in much leſs time, and ſixteen days might be ſufficient. I likewiſe remember a company of gentlemen who made the voyage by way of Cairo and Suez, from London to Madras in two months and ten days. By ſuch repeated trials, it is evident that it is by far the ſhorteſt and quickeſt

quickeſt paſſage to India; and a regular poſt eſtabliſhed there, at leaſt to forward diſpatches, may often be of the greateſt benefit. How much more ſo would it be if a ſafe commerce could be eſtabliſhed?

To have a communication with the Red Sea and the Mediterranean by water, a canal either directly from the one ſea to the other, or by the former and the Nile, would be the only practicable way. There would be one inconvenience as to the firſt propoſal, namely, that there is no harbour, nor any place for ſhelter for veſſels upon the whole coaſt, where ſuch a canal could join the Mediterranean, nor any freſh water to be found any where near to it: as to the latter I cannot ſee any great difficulty, except the labour and expence. Much greater undertakings have been accompliſhed in England in that way. Some writers have aſſerted, and others have repeated it after them, that there was a danger in ſpoiling the water of the Nile, by cutting a canal from the Red Sea to the Nile, as they ſuppoſed, or believed, the level of the Red Sea to be higher. A late traveller, whom I ſaw in Cairo, in a pamphlet which he wrote on it, even ſuppoſed this might be the caſe, if a canal was cut from Coſſier to Kerma in Upper Egypt. Without convincing arguments I could not ſo eaſily give credit to ſuch a ſuppoſition; for I ſhould imagine, that the laws of gravity are the ſame all over the globe, and that therefore ſuch ſeas, which have a connection with each other, as the Weſtern and Indian Ocean, the Mediterranean, the Red Sea, the Baltic, &c. &c. would naturally all find the ſame level. There is only one circum-

ſtance which might raiſe the Red Sea at certain times a few feet higher than the Mediterranean, which is this, that there is not the leaſt tide obſervable in the latter on the coaſt of Egypt, though at Leghorn there is ſtill ſome ſmall riſe; but, in the former, the tide riſes even at its extremity a few feet: I do not exactly recollect how many. But conſidering that at Cairo, where ſuch a canal from Suez would moſt naturally meet the river, the bed of it muſt be conſiderably higher than the Mediterranean, to enable it to flow into the latter for the ſpace of about one hundred miles with conſiderable velocity, I cannot think that the difference one way or the other can be great, much leſs could I, for the ſame reaſon, conceive the Red Sea to be higher at Kerma and Coſſier, which is ſtill more than three hundred miles further up.

It would certainly be attended with convenience if there were two canals; one between Suez and Cairo, and another between Coſſier and Kerma: for, by all the information which I could gather from the Engliſh Captain who navigated this ſea, ſhips may eaſily come as far as Coſſier, but are often obliged to ſpend ſeveral weeks to work from thence up to Suez, and if they come a little too late in the ſeaſon they cannot reach the latter place at all. I am not ſufficiently acquainted with that part of the country through which this latter canal muſt paſs, and there might be hills to cut through; but this can be no inſurmountable obſtruction, as it has been often practiſed in England. This upper canal would be the moſt convenient

nient for goods coming from India, as there is no difficulty in the navigation down the river even from Aſſuan. On the contrary, goods coming from the Mediterranean would be more conveniently ſhipped at Suez, they would not have to go ſo far againſt the current up the river, and there is ſcarce ever any difficulty of ſailing from Suez.

Should this country ever fall into the hands of a civilized nation, able to maintain itſelf there, and to improve the advantages of its ſituation for commerce, what is mentioned above would not be the only probable improvement; but the adjoining parts of Africa, ſuch as the Nubians, Abyſſinians, and others more to the weſtward, might by degrees be brought to ſee the advantages of a trading connexion with a people, amongſt whom they would be aſſured of the protection of that property which they might gain thereby. It certainly would require time to obliterate old prejudices, but nothing would ſooner convince them of the benefit of a friendly intercourſe than repeated proofs of the ſtrict juſtice done to them in their trading concerns. With an increaſing trade civilization would ſpread, and Africa, till now ſo little known, as to the interior parts, might become a ſource of immenſe wealth.

FINIS.

MR. STOCKDALE takes the liberty reſpectfully to inform the Public, that he has, for a conſiderable time paſt, been preparing, under the ſanction of HIS MAJESTY, a Grand Map of Ireland, on the moſt extenſive ſcale hitherto attempted: alſo a Map of Great Britain, even of ſtill greater magnitude.

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Piccadilly, June 1800.

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